# 3.0 WIC INFORMATION SYSTEM FUNCTIONS

This section describes the functional requirements for a WIC IS. Functions that are considered core (required) or future core by FNS and/or the NWA Technology Committee are indicated in italics throughout this section. A complete listing of core (required) or future core functions is available in Appendix B: NWA/FNS WIC Strategic Planning Core/Future MIS Functions.

Each function begins with a narrative description, which may include one or more levels. Understanding that States have unique technology and budgetary constraints, FNS established functional levels (when possible) to indicate alternative methods by which functional requirements can be fulfilled with varying degrees of automation.

Following the narrative, system inputs, processes, and outputs have been developed to outline what is accomplished by the IS to fulfill the functional requirement. These have been established at a general level and may vary based on State requirements or technology constraints. To manage the volume of inputs for each function, when the Participant Identification Number is listed as an input, it is assumed that this will include basic data elements that are linked to the ID, such as participant name, family/household grouping, address, WIC category, and date of birth.

### 3.1 CERTIFICATION

The Certification functional area is intended to support application processing and certification of WIC participants. To be certified as eligible to receive Program benefits, applicants must meet categorical, income, residence, and nutrition risk requirements. WIC certification involves capturing relevant demographic, income, health-related, and reference data on applicants to and participants in the WIC Program. In this area, eligible applicants are certified to receive nutrition education, breastfeeding support, referral to health and social service programs, and food benefits. Upon certification WIC recipients are prescribed and issued a monthly food package. Certification functionality also includes the ability to process participant data changes and transfers.

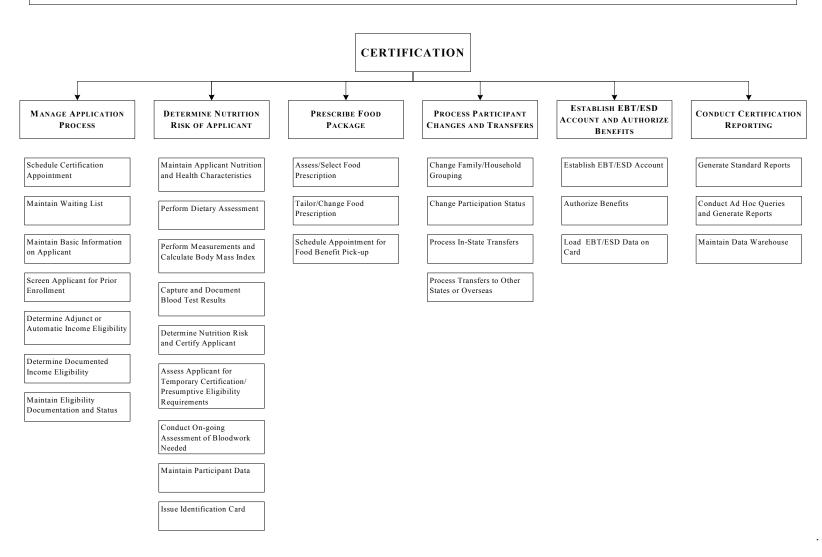
In an electronic services environment, certification also includes the account setup and benefit authorization for electronic service delivery (ESD) and/or electronic benefits transfer (EBT). The EBT/ESD card may be issued at this point or during the food benefit issuance process.

Certification is made up of the following functions. (Due to the various processes performed in WIC local agencies, some functions may take place in a different order):

- Manage Application Process
  - Schedule Certification Appointment
  - Maintain Waiting List
  - Maintain Basic Information on Applicant
  - Screen Applicant for Prior Enrollment
  - Determine Adjunct or Automatic Income Eligibility
  - Determine Documented Income Eligibility
  - Maintain Eligibility Documentation and Status
- Determine Nutrition Risk of Applicant
  - Maintain Applicant Nutrition and Health Characteristics
  - Perform Dietary Assessment
  - Perform Measurements and Calculate Body Mass Index
  - Capture and Document Blood Test Results
  - Determine Nutrition Risk and Certify Applicant
  - Assess Applicant for Temporary Certification/Presumptive Eligibility Requirements
  - Conduct On-going Assessment of Bloodwork Needed
  - Maintain Participant Data
  - Issue Identification Card

- Prescribe Food Package
  - Assess/Select Food Prescription
  - Tailor/Change Food Prescription
  - Schedule Appointment for Food Benefit Pick-up
- Process Participant Data Changes and Transfers
  - Change Family/Household Grouping
  - Change Participation Status
  - Process In-State Transfers
  - Process Transfers to Other States or Overseas
- Establish EBT/ESD Account and Authorize Benefits
  - Establish EBT/ESD Account
  - Authorize Benefits
  - Load EBT/ESD Data on Card
- Conduct Certification Reporting
  - Generate Standard Reports
  - Conduct Ad Hoc Queries and Generate Reports
  - Maintain Data Warehouse

# WIC FUNCTIONAL REQUIREMENTS - FUNCTIONAL DECOMPOSITION DIAGRAM CERTIFICATION



### 3.1.1 MANAGE APPLICATION PROCESS

The WIC Program collects and maintains information on individuals applying for participation in the WIC Program. Individuals provide this data to the WIC Program when they telephone or visit the agency. If an applicant does not meet the basic requirements for category, residence and income, the applicant will not continue with nutrition risk eligibility interviews and will not become a participant in the WIC Program at that time.

The workflow in WIC clinics may vary from agency to agency. Some agencies prefer to perform basic eligibility and income screening prior to setting up a certification appointment. Other clinics perform the eligibility and income screening at the same time as the nutrition risk analysis for certification. Therefore, the specific processes performed within the initial application process or included within the certification screening may vary according to the procedures performed by a local agency.

# 3.1.1.1 Schedule Certification Appointment

Applicants who wish to participate in the WIC Program contact the WIC clinic to schedule an appointment to determine their eligibility to receive WIC benefits. When a local agency has reached maximum caseload capacity, a waiting list is established (see section 3.1.1.2). Individuals already certified who are relocating from within or out of state receive priority over new Program applicants, and are generally enrolled immediately to minimize the interruption of services; therefore a certification appointment should be scheduled as soon as possible.

<u>Level 1</u>. When scheduling an appointment, local agencies query the system to determine the availability of a particular date and time. (To accomplish this, the WIC staff input a maximum number of available slots for each type of appointment on each day and time period at the clinic when setting up the master calendar. See section 3.9.1). If all appointment slots are full for a particular day, the system should notify the WIC staff and allow the staff to select another day and/or time. In addition, the system should allow WIC staff to:

• Add an appointment even when all schedule slots appear to be full (i.e., allow overbooking to compensate for expected no shows).

- Record appointment information and produce a schedule of appointments to allow staff to adjust workload and retrieve records in advance of the appointments.
- Accept applicant preferences for an appointment time, including such parameters as time of day, day of week, language, and linkage with other family/household members. Once the preferences are entered, the appointment scheduler should suggest available appointments that match the preference criteria.

Please note that the appointment data element is referred to as an "event" as the scheduling system might schedule other types of activities such as nutrition education classes.

# **Input:**

Clinic Identification Number

**Event Preference Preferred Day** 

Event Preference Preferred Language Code

**Event Preference Preferred Time** 

**Event Slot Date** 

**Event Slot Description** 

**Event Slot Duration** 

**Event Slot Identification Number** 

Event Slot Language Code<sup>1</sup>

**Event Slot Maximum Number of Slots** 

Event Slot Required Resource Type Code

**Event Slot Time** 

Event Slot Type Code

Local Agency Identification Number

Master Calendar Identification Number

Participant Family/Household Identification Number

Participant Identification Number

Resource Identification Number

### **Process:**

- Accept user input of preference parameters or retrieve preference information from Participant data store
- Collect and store daily appointment schedule data and applicant appointment data in the Event Preference and Event Slot data stores
- Check for appointment availability at particular time and date that meet preference parameters

<sup>&</sup>lt;sup>1</sup> An input described as a code indicates that the user may choose one variable from a list of several variables or all variables that apply. For example, a clinic may serve participants that speak English, Spanish, or Hmong. Language codes for each language (such as EN, SP, HM) would be set up in the IS. To see the raw data for various codes, see Data Section.

- Adjust the Event Slot Maximum Number of Slots (the maximum number of slots available for a particular day and time) each time a new appointment is made
- Provide Appointment Notice to applicant

### **Output:**

Screen display of appointment schedule availability Screen display of applicant's appointment schedule Daily schedule of events Appointment notice to applicant

# 3.1.1.2 Maintain Waiting List

<u>Level 1</u>. For each local agency, the system should maintain a waiting list of the applicants who desire to enroll in the WIC Program when caseload is full. As caseload slots become available, the system should look to the waiting list for additional applicants. The system must select those applicants by expected or determined priority level so the higher risk applicants are certified before the lower risk applicants. Individuals already certified who are re-locating from within or out of state are served first so that services are not interrupted.

The system should indicate that the applicant is on the waiting list by a specific code in the participant wait list status field. It should also produce a list of the applicants and basic data on each applicant waiting for their certification appointment. The WIC staff may then either change the applicant's wait list status field to indicate the applicant is no longer on the waiting list, delete the record from the system if the applicant is no longer interested or available, or do nothing to the record to leave the applicant on the waiting list.

# Input:

Clinic Identification Number Local Agency Identification Number Participant Health Nutrition Risk Criteria Code Participant Identification Number Participant Priority Level Code Participant Status Code

# **Process:**

- Accept CPA identity and post it to applicable certification sessions
- Update applicant status with Participant Status Code for Waiting List

- Calculate Waiting List Priority
- Retrieve participant records with Waiting List Active Status
- Sort records by Waiting List Priority
- Display Waiting List in priority order
- Update Participant Status

### **Output:**

Printed report or screen display of waiting list Notification of waiting list status

# 3.1.1.3 Maintain Basic Information on Applicant

Collecting basic data about each applicant is important because the data are used throughout subsequent WIC Program activities. The data are used by other functions to notify applicants of their appointments (such as for nutrition education and food instrument pickup), and, after certification, to help determine and track the type of food benefits the participant is assigned, and to determine the current caseload of a State or local agency.

Level 1. The majority of basic data are collected when the applicant visits the agency. However, some of the data may be collected when the applicant telephones the agency. Some data may already be collected in the system for those participants who are reapplying for certification to WIC following a previous certification period. Applicant data may be received through various means and at different times. In order to track the applicant through the application process, the system or the user should assign a unique application identification number. This number may be used as the participant identification number, but for reporting and tracking purposes it may be more beneficial if the application identification number is different from the participant identification number.

Therefore, the system must allow users to add, change, and delete data on demand by accessing records through the unique identification number. While a participant's (or applicant, prior to certification) record may be updated with each visit to the clinic, the system should maintain the certification data that is the basis for eligibility.

The system should capture demographic and eligibility information (such as name, address and category- pregnant woman, etc.) on individuals at the time of certification. All members of the same family/household should be associated using a common identification number. The system should automatically update or modify records of all associated family/household members enrolled or participating by linking the common family/household ID. The family/household ID is used to facilitate coordination of certification periods for family/household members, transferring families/households within the system, and food package tailoring when several family/household members are eligible to receive the full package<sup>2</sup>.

# Input:

Clinic Identification Number

Local Agency Identification Number

Participant Address- Apartment

Participant Address- City

Participant Address- Street

Participant Address- Zip Code

Participant Alias Name

Participant Application Date

Participant Application Identification Number

Participant Category Code

Participant Certification End Date

Participant Data Sharing Consent

Participant Data Sharing Entity

Participant Date of Birth

Participant Date of First Certification

Participant Date of Initial Contact

Participant Education Level Code

Participant Employment Status Code

Participant Expected Date of Delivery

Participant Family/Household Identification Number

Participant Family/Household Size

Participant Guardian Name

Participant Health Source of Prenatal Care

Participant Identity Documentation Code

Participant Income Documentation Code

Participant Income per Period

Participant Income Period

<sup>&</sup>lt;sup>2</sup> This is a core function.

Participant Language Spoken Code

Participant Marital Status Code

Participant Name-First

Participant Name- Last

Participant Name- MI

Participant Physical Presence Exception Code

Participant Physical Presence Indicator (Y/N)

Participant Racial/Ethnic Code

Participant Residency Documentation Code

Participant Self-Declared Income Eligibility Code

Participant Sex

Participant Source of Information About WIC Code

Participant Status Code

Participant Telephone Number

Transfer Date

Transfer From

Transfer To

### **Process:**

- Accept CPA identity and post it to applicable certification sessions
- Assign application identification number and create a new participant record or accept user input of participant identification number/application identification number (or other identification data) to access existing data
- Add new applicants to or update existing records in the Participant data store
- Generate or accept user input of family/household identification number and associate it to the applicant
- Associate all other family/household members to the Participant Family/Household Identification Number
- Make changes to basic applicant data to all records associated with the family/household identification number
- Generate screen display of linked participant family/household

### **Output:**

Screen display of applicant data

# 3.1.1.4 Screen Applicant for Prior Enrollment

<u>Level 1</u>. Upon input of applicant data (and at benefit issuance during a certification), the system should check to ensure that the applicant is not already

enrolled at the local agency or clinic<sup>3</sup>. The system should compare items such as participant name, address, date of birth, racial/ethnic code, and sex. If a match is found, the system should inform the user of the possibility of dual enrollment.

<u>Level 2</u>. Depending on the technology used, the user could access a statewide database or a database of CSFP enrollees to determine whether the applicant is enrolled at other local WIC and/or CSFP agencies. Where possible, a statewide database is highly desirable as it would enable local agency staff to easily transfer participants from one agency to another. The staff at the participant's new location would be able to access the participant's file to find out what foods were issued at the former local agency and when they were last issued, as well as other information useful in providing continued health and nutrition-related services<sup>4</sup>.

Level 3. Where two separate State agencies operate within a State (e.g., a geographic State agency and an Indian Tribal Organization or WIC and CSFP) the system should produce a data tape or an electronic file for exchange. One or both of the State agencies involved should perform a participant data match. This information is used to flag possible instances of dual participation for follow-up action.<sup>5</sup>

### **Input:**

Participant Address- Apartment

Participant Address- City

Participant Address- Street

Participant Address- Zip Code

Participant Alias Name

Participant Application Identification Number

Participant Category Code

Participant Date of Birth

Participant Family/Household Identification Number

Participant Name- First

Participant Name- Last

<sup>&</sup>lt;sup>3</sup> In a distributed system, prior enrollment in another clinic cannot be checked upon entry of applicant data, although prior enrollment in the clinic where the applicant is applying can be checked at this point. For States using a distributed system, enrollment/participation reports or data files should be used to check prior enrollment in the State's WIC Program.

This is a core function.

<sup>&</sup>lt;sup>5</sup> This is a core function.

Participant Name- MI Participant Racial/Ethnic Code Participant Sex

### **Process:**

- Accept CPA identity and post it to applicable certification sessions
- Maintain statewide centralized database for dual participation/ dual enrollment matching
- Match newly entered applicant data with data in participant data store
- Display potential matches in Dual Participation Potential Match data fields (Dual Participation Potential Match Applicant CSFP, Applicant Other States Agency, Applicant WIC, Certified CSFP, Certified Other State Agency, Certified WIC)
- Accept user input to potential matches

### **Output:**

Screen display of prior enrollment Notice of dual enrollment to applicant

# 3.1.1.5 Determine Adjunct or Automatic Income Eligibility

<u>Level 1</u>. The system should enable the user to indicate whether an applicant, or one or more of the applicant's family/household members, is income eligible for WIC as a result of their eligibility for or enrollment in other benefit programs. The system should capture the name of the program that is the basis for WIC income eligibility, whether through adjunct or automatic income eligibility. The applicant should provide documentation of adjunct income eligibility by showing, for example, a Food Stamp notice of eligibility. (See section 3.1.1.6 for documentation of income.)

For Minimum Data Set (MDS) reporting, the system should enable the user to enter <u>all</u> the adjunct programs in which the applicant is currently eligible. Also needed is an income range and period, i.e., week, month, etc. (see MDS Specifications). At the State agency's option, the applicant's self-declared income amount may be entered into the system as opposed to an income range. If the applicant is adjunctively income eligible, the system must permit the user to enter an income amount or an income range that exceeds the maximum allowed for WIC (based on the established Income Eligibility Guidelines) if the

maximum income limit in the adjunct Program is greater than the maximum income limit for WIC.

<u>Level 2</u>. Where the system interfaces with another health and/or social services system, the WIC IS should permit the WIC staff to retrieve information to confirm the applicant's adjunct or automatic income eligibility for WIC. Where participant information is shared with other programs, WIC Program regulations and FNS Instruction 800-1 should be followed regarding confidentiality.

# **Input:**

Participant Adjunct or Automatic Income Eligibility Code(s)

Participant Application Identification Number/ Participant Identification Number

Participant Family/Household Identification Number

Participant Income Documentation Date

Participant Income Period

Participant Income Range per Period

Participant Participation in Food Distribution Programs on Indian Reservations

Participant Participation in Food Stamps

Participant Participation in Medicaid

Participant Participation in Other Programs

Participant Participation in TANF

Participant Self-Declared Income Eligibility Code

# **Process:**

- Accept CPA identity and post it to applicable certification sessions
- Accept user input of participation in adjunctive or automatic eligibility program, self-declared income, and participant income information
- Update participant data store for all members of the family/household
- Retrieve data through interface with other health and/or social service systems (i.e., Food Stamp Program, TANF, Medicaid, or other State programs) if applicable

# **Output:**

Screen display of adjunct or automatic income eligibility status

### 3.1.1.6 Determine Documented Income Eligibility

<u>Level 1</u>. If the applicant is not adjunctively or automatically income eligible, he or she must be assessed for income eligibility through normal screening procedures. WIC income eligibility requirements are based on the number of

individuals who share income and resources in the applicant's household (i.e., the economic unit) and the total gross income of that economic unit. Income Eligibility Guidelines, published annually, establish maximum weekly, biweekly, twice-monthly, monthly and annual income levels <u>for each economic</u> unit.

The system should accept and process income in any of the following increments: weekly, bi-weekly, twice-monthly, monthly and annual. The system should compare the income reported by the applicant to the maximum income allowed, and identify income that exceeds the maximum. If the applicant's income is stable, no calculation may be necessary. However, if the income fluctuates or is episodic, WIC staff may need to enter several amounts into the system to obtain a monthly or annual income amount that can be used for comparison to the appropriate maximum income limit. *The system should perform all necessary calculations based on the information entered by the WIC staff*<sup>6</sup>.

The system should have the following additional features as well:

- Permit the user to enter an income level that exceeds the maximum allowed for WIC only if the applicant is participating in TANF, FSP or Medicaid (see section 3.1.1.5) or, if applicable, other programs that convey automatic income eligibility.
- Alert the user that the applicant has already been determined adjunctively income eligible, if appropriate.
- Capture the income amount and date of income determination each time an applicant's income is assessed or a participant's income is reassessed.
- Store the applicant's income level in the individual's record for those individuals determined income eligible.
- Maintain income information for applicants determined ineligible, along with the reason for ineligibility.
- Permit the applicant's income and family/household size information to be saved and applied, as appropriate, to other members of the economic unit who are also applying for WIC.
- Compare income data for all economic unit members on WIC to prevent inconsistencies in income information.

<u>Level 2</u>. The system should print a notice of ineligibility for individuals determined ineligible based on the income assessment.

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<sup>&</sup>lt;sup>6</sup> This is a core function.

<u>Level 3</u>. The system should capture the identity of the person making the eligibility determination.

### **Input:**

Participant Application Identification Number/ Participant Identification Number

Participant Family/Household Size

Participant Income Documentation Date

Participant Income per Period

Participant Income Period

Participant Ineligibility Date

### **Process:**

- Accept annual updates to income guidelines
- Accept CPA identity and date of income eligibility determination
- Add, update, and delete income and family/household data
- Calculate annual or monthly family/household income
- Retrieve and compare applicant's income with Income Eligibility Guidelines
- Allow user input of income levels that exceed maximum allowed level if the participant has provided proof of participation in TANF, FSP, or Medicaid, or any other automatic income eligibility program
- Determine income eligibility status and alert user to applicant's adjunctive or automatic eligibility status
- Display status of income eligibility determination and update Participant Ineligibility Date and Participant Ineligibility Reason Code.
- Compare income data entered for all members of the family/household and produce a screen display of inconsistencies.
- Allow user to accept or reject income data displayed as inconsistencies across family/household members, as appropriate.
- Apply income eligibility determination to all members of the family/household.

# **Output:**

Screen display of individual's income eligibility status Ineligibility notice to ineligible applicants

### 3.1.1.7 Maintain Eligibility Documentation and Status

To receive WIC benefits, applicants must not only be eligible based on category and income, they must also meet residency requirements and have at least one nutrition risk condition<sup>7</sup>. All applicants must provide documents to show proof of identity, income, and residence within 30 days of their certification visit or they must be terminated from the system and issued a notice of ineligibility. However, at the State agency's option, a pregnant woman who is income eligible and meets residential requirements may be certified without a nutrition risk assessment for a period of up to 60 days. In addition, all applicants, including infants and children, must be physically present at their certification appointment. In some cases, documentation and physical presence requirements can be waived, but should be documented.

<u>Level 1</u>: Based on applicant information collected thus far, the system should:

- Capture the specific documents used as proof of income (e.g., pay stub, tax return<sup>8</sup>), proof of identity, and proof of residency (e.g., a current utility bill, rent or mortgage receipts), or the reason for an exception.
- Indicate that applicants were physically present at the certification visit or the reason for an exception.
- Generate a notice for the applicant with the specific date (30 days from the certification date) that specific documents must be provided.
- Generate a notice of ineligibility and the reason(s) for ineligibility, if applicable.
- Automatically terminate applicants who have not provided income documents within 30 days of date of certification<sup>9</sup>.

# **Input:**

Participant Application Identification Number/ Participant Identification Number

Participant Certification Date

Participant Certification End Date

Participant Certification Status Code

Participant Identity Documentation Code

Participant Income Documentation Code

Participant Income Documentation Date

Participant Ineligibility Reason Code

Participant Physical Presence Exception Code

Participant Physical Presence Indicator (Y/N)

Participant Residence Documentation Code

At the State agency's option, applicants that do not bring proof of income to the certification appointment, but meet all program requirements, including nutrition risk, may be temporarily certified and receive benefits for one month. See section 3.1.2.6 on status of eligibility following nutrition risk assessment. <sup>8</sup> This is a future core function.

<sup>&</sup>lt;sup>9</sup> This is a core function.

### **Process:**

- Accept input of source of income information (i.e. pay stub, letter from Medicaid, etc)
- Capture applicant's physical presence at certification visit or reason for exception
- Calculate date income documents or the nutrition assessment are due
- Provide a notification that benefits will terminate if income documentation or the nutrition assessment is not completed by a specific date (30 days from date of temporary certification and 60 days from date of certification for women deemed presumptively eligible)
- Automatically terminate after 30 or 60 days and prevent issuance of food instruments past 30 or 60 days from date of certification if income documents are not provided
- Generate Notice to applicants of the specific documents needed and the date by which they must be provided
- Generate Ineligibility/Referral Notice

### **Output:**

Screen display of documentation recorded Notice of documents needed and date due Notice of ineligibility and reason Notice of certification termination

### 3.1.2 DETERMINE NUTRITION RISK OF APPLICANT

Generally, the local agency assesses the nutrition risk of applicants at the time of certification. Once the applicant's nutrition risk is determined, the appropriate food package is assigned. Determining nutrition risk is important because the WIC Program strives to reach those individuals who are at the greatest risk for health problems due to poor nutrition. Based on the applicant's nutrition and health characteristics, the WIC staff is able to determine the appropriate nutrition risk conditions, nutrition education messages, and health care referrals. Furthermore, this information is used to evaluate the individual's health and nutrition progress while participating in WIC.

Since participant health and nutrition data are received through various means and at different times, the system should allow users to review, add, change, and delete health and nutrition data at any time. However, those data that are the basis for eligibility determinations must be maintained for audit tracking purposes.

# 3.1.2.1 Maintain Applicant Nutrition and Health Characteristics

The nutrition risk assessment is made based on information obtained by the CPA from the applicant, or primary caregiver in the case of an infant or child, regarding his or her nutrition and health characteristics. Some of the information is obtained by interviewing the applicant, while other information is obtained through height and weight measurements and a blood test, or from referral information. The anthropometric measurements and blood test may be performed during the certification assessment or by the applicant's doctor or other medical provider. These data are necessary to support both initial and subsequent certification, and to identify particularly high-risk participants to receive more frequent monitoring and intensive nutrition education than others. Much of the data collected during the nutrition risk assessment will be used in reporting to FNS and CDC. The datasets are described further in the Nutrition Education, Health Surveillance, and Referrals section.

<u>Level 1</u>. The system should allow the entry of applicant nutrition and health characteristics data. In addition, the system should enable the data to be

modified as necessary throughout the individual's application and certification period, but not after the certification period.

<u>Level 2</u>. As participant health and nutrition related information changes, the system should retain selected historical data (e.g., height and weight) in addition to capturing more current data. This data may then be used to track an individual participant's progress and to do an historical analysis of participants of a particular type or in a particular geographic location. Historical encounter data should be maintained chronologically in the applicant's file.

# Input:

Participant Age

Participant Application Identification Number/ Participant Identification Number

Participant Date of Last Checkup/Immunization- Infants and Children

Participant Health Anthropometric Date

Participant Health Height/Length

Participant Health Hematocrit

Participant Health Hematocrit Date

Participant Health Hemoglobin

Participant Health Hemoglobin Date

Participant Health Infant Birth Length

Participant Health Infant Birth Weight

Participant Health Pregnancy Outcome Code

Participant Health Trimester of First WIC Visit

Participant Health Weight

Participant Health Weight at Labor

Participant Health Weight Change Code

Participant Health Weight Prepregnancy

### As Applicable to Risk Conditions:

Breastfeeding Data Collected Date

Breastfeeding Discontinued Reason Code

**Breastfeeding Duration** 

Breastfeeding Infant Currently Breastfeeding

Breastfeeding Infant Ever Breastfeeding

Breastfeeding Status Code

Breastfeeding Supplemental Formula Received

Participant Expected Date of Delivery

Participant Health Blood Pressure

Participant Health Cigarette Smoking

Participant Health Cigarettes per Day

Participant Health Dietary Deficiency Code

Participant Health Dietary Supplement During Pregnancy

Participant Health Dietary Supplement Prepregnancy

Participant Health Drink

Participant Health Drink per Week- 3 Months Prepregnancy

Participant Health Drink per Week- Last Trimester

Participant Health Drug

Participant Health Drug Frequency

Participant Health Gestational Diabetes

Participant Health Height/Length Change Code

Participant Health Hematocrit Change Code

Participant Health Hemoglobin Change Code

Participant Health High Blood Pressure During Pregnancy

Participant Health Infant Gestational Age

Participant Health LMP Date

Participant Health Multiple Fetuses

Participant Health Multiple Fetuses Number of Live Births

Participant Health Pregnancy Weight Gain

Participant Health Previous Pregnancy

Participant Health Previous Pregnancy End Date

Participant Health Source of Prenatal Care

Participant Health Source of Prenatal Care Begin Date

Participant Health Trimester

Participant Health TV/Video Viewing

Participant Number of Live Births

Participant Physical Presence Exception Code

Participant Physical Presence Indicator (Y/N)

# **Process:**

- Accept CPA identity and post it to applicable certification sessions
- Accept user entered Participant, Participant Health, and Breastfeeding data
- Update the Participant, Participant Health, and Breastfeeding data stores

### **Output:**

Screen display of participant health data

# 3.1.2.2 Perform Dietary Assessment

To accomplish a dietary assessment, some applicants complete a 24-hour dietary recall form, indicating foods most recently consumed. For others, the nutritionist may use a food frequency form, which is used to collect the frequency of foods consumed over a period of time, such as a week. Other states are moving toward

a behavior-based interview format to collect nutrition data. In any case, the nutritionist evaluates reported dietary intake for use in determination of nutrition risk.

<u>Level 1</u>. The CPA records his/her analysis of the dietary assessment in the automated system.

<u>Level 2</u>. The applicant is asked to fill out a manual dietary recall form or food frequency form. The WIC staff enters the data into the system, where it is used by the CPA in determining nutrition risk.

Level 3. Upon entering the nutrition information, the system should automatically assign a score based on the foods' nutrient value. The system should also automatically flag scores determined to be  $low^{10}$ .

<u>Level 4:</u> Alternatively, the dietary recall form can be automated so that the participant could complete the form on-line (either at a lobby kiosk or through a web-based application) prior to meeting with the nutritionist, who would not have to perform any manual input.

# **Input:**

Nutrition Assessment Dietary Score

Nutrition Assessment Food Consumed Amount

Nutrition Assessment Food Consumed Date

Nutrition Assessment Food Consumed Type

Nutrition Assessment Food Group

Nutrition Assessment Food Group Frequency per Day

Nutrition Assessment Food Group Score

Nutrition Assessment Infant First Supplemental Feeding

Participant Application Identification Number/ Participant Identification Number

### **Process:**

- Accept CPA identity and post it to applicable certification sessions
- Accept user input of Food and Amounts Consumed
- Calculate Actual Daily Food Intake Amount
- Compare Actual Daily Food Intake to Required Daily Food Intake
- Assign nutrition food/dietary score

<sup>&</sup>lt;sup>10</sup> This is a future core function.

- Store data in Nutrition Assessment data store
- Display results of Dietary Assessment

# **Output:**

Screen display of participant dietary assessment

#### 3.1.2.3 **Perform Measurements and Calculate Body Mass Index**

The applicant's height, or length and head circumference for infants, and weight measurements are required to be taken and/or documented in the applicant's file at the time of certification. Weight and height or length must be measured not more than 60 days prior to certification. In addition, Body Mass Index (BMI) is used as a screening tool to assess nutrition risk for women and children 2 years of age and older. Applicants whose measurements are outside the normal range may be determined to be at risk, by the CPA, based on allowed WIC nutrition risk criteria.

Level 1. The system should capture the data, based on CDC standards, for anthropometric measurements and BMI and use this as the basis for assessing nutrition risk of WIC applicants. The system should calculate a woman's Body Mass Index (BMI) based on height and weight inputs to the system and determine her weight status classification (e.g., underweight, normal, overweight, obese). The weight status classification will vary depending on category of the participant. WIC staff should enter the date measurements were taken and the system should alert the staff if the measurement is more than 60 days old. In addition, the system should maintain prenatal weight gain charts for pregnant women.

<u>Level 2</u>. The system should graphically plot an individual's growth and/or provide the nutritionist with the calculated percentiles, based on inputs to the system such as height, weight, and head circumference (for infants)<sup>11</sup>. The types of growth charts produced will vary depending on the age, sex, and category of the participant. The system should be able to accept changes in growth data as entered and recalculate the growth chart.

<sup>&</sup>lt;sup>11</sup> This is a future core function.

### **Input:**

Participant Application Identification Number/ Participant Identification Number

Participant Health Anthropometric Date

Participant Health Head Circumference

Participant Health Height/Length

Participant Health Weight

### **Process:**

- Accept CPA identity and post it to applicable certification sessions
- Accept user input of anthropometric data or retrieve data from Participant Health data store
- Compare actual measurements to CDC standards
- Assign BMI score and weight status classification
- Generate Graphic Growth Chart or Percentile Chart with participant's data

### **Output:**

Screen display or printout of participant growth chart Participant percentile change chart (optional)

### 3.1.2.4 Capture and Document Blood Test Results

All WIC applicants, except for infants younger than 9 months old, must be tested for anemia. A hematological test for anemia (such as a hemoglobin, hematocrit, or erythrocyte protoporphyrin test) must be performed by the WIC agency or test results obtained from a referral source. Blood test results must be documented in the applicant's file. Bloodwork must be done at appropriate times in accordance with program regulations.

<u>Level 1</u>. The system should allow the user to enter the date the blood test was performed and the test results. The system should not accept the entry of a blood test date that is outside the appropriate range based on the applicant's category.

<u>Level 2</u>. At the State agency's option, if an individual is eligible based on income and has at least one qualifying nutrition risk present at certification, the individual <u>may</u> be certified without a blood test for a period up to 90 days (see 3.1.2.6). The system should display a reminder on screen at certification to remind the user that at least one risk condition is needed. Note: Participants who

do not have blood test results within 90 days should <u>not</u> be terminated by the system.

- <u>For Pregnant Women</u>: A blood test must be taken during pregnancy. Using the expected delivery date, the system should calculate the earliest possible date of pregnancy, and not allow entry of a date outside of this range.
- <u>For Postpartum Women</u>: The system should capture the date of termination of pregnancy, and calculate the date certification is due to expire. For postpartum women, this date is 6 months after the date of termination of pregnancy. The user should not be allowed to enter a blood test date that is before the date of delivery or to enter a date that is past the participant's certification end date.

Optimally, the time to collect bloodwork for the postpartum woman is 4-6 weeks after birth. Therefore, the system should enable the user to generate a list of postpartum women who are approaching their 4th week postpartum so an appointment can be made.

• For Breastfeeding Women: Results of a hematological test must be obtained at certification. A blood test must be taken before her infant reaches one year of age. The system should prevent the user from entering a date of blood work for the mother that is before her infant's date of birth or after 12 months following her infant's date of birth. If a breastfeeding woman was previously certified as postpartum, the blood test results taken following termination of pregnancy should automatically populate the breastfeeding woman's record.

Optimally, the time to collect blood work for the breastfeeding woman is 4-6 weeks postpartum. Therefore, the system should enable the user to generate a list of breastfeeding women who are approaching their 4th week postpartum so an appointment can be made.

• For Infants 9 Months Old or Older: For infants 9 months old or older, results of a hematological test for anemia must be obtained at certification. Infants are certified at intervals of approximately 6 months, except State agencies may allow infants less than 6 months of age to be certified up to the infant's first birthday. The system should prevent the user from entering a date of blood work for the infant that is before the infant's date of birth or after the infant reaches 12 months of age.

The optimal time for collection of blood work for infants is 9 to 12 months of age. The system should enable the user to generate a list of infants who need to have an appointment for a blood test within this time frame.

• For Children 12 to 24 Months of Age: Results of a hematological test for anemia must be obtained at certification. For children over 12 months of age but less than 13 months of age at certification, if a blood test was performed between 6 and 11 months of age, and the data is less than 6 months old, no additional bloodwork is needed for the child. If the

infant's blood work data exists in the system and it meets the requirements stated above, the data from the infant's record should automatically populate the child's record. For children over 13 months of age but less than 25 months of age at certification, a blood test must be taken.

CDC recommends a blood test be performed around 15 to 18 months of age (or 6 months after the first blood test taken between 9 and 12 months). For all children 1-2 years old, the system should generate a list of children who need an appointment based on the following systemgenerated information: The individual's date of hematocrit/hemoglobin plus 6 months.

• For Children 2-5 Years of Age: The system should determine at each certification, whether the child's blood test was within the normal range during the previous certification period. If so, blood work is not needed until 12 months from the date of the last blood test; otherwise, blood work is required within 6 months of the date of the last blood test.

Based on the determination of a normal or abnormal blood test for anemia, the system should enable the user to generate a list of children who are approaching their 6 or 12 month time frame so that an appointment can be made.

<u>Level 3.</u> The system should enable the user to generate a list of individuals who need a follow-up appointment for a blood test. The system should also enable the user to list individuals who need an appointment for nutrition risk assessment.

<u>Level 4</u>. The system should track the number participants, by category, with missing blood test data after the 90-day period and summarize this information for the State agency and by local agency within the State agency.

<u>Level 5</u>. Autodialers or other forms of reminders could be used to facilitate appointment scheduling.

### **Input:**

Participant Actual Date of Delivery

Participant Application Identification Number/ Participant Identification Number

Participant Certification Date

Participant Date of Birth

Participant Expected Date of Delivery

Participant Health Hematocrit

Participant Health Hematocrit Date

Participant Health Hemoglobin

Participant Health Hemoglobin Date

### **Process:**

- Accept user input of bloodwork or retrieve data from Participant and Participant Health data stores
- Run an algorithm to determine if bloodwork is needed in a specified time period based on participant category, participant age, date of certification, and date of last bloodwork
- Determine participants requiring bloodwork

# **Output:**

Screen display or printed list of participants needing bloodwork

# 3.1.2.5 Determine Nutrition Risk and Certify Applicant

Program regulations establish a priority system to ensure individuals most in need are served first when caseload slots are no longer available. In addition, FNS provides State agencies with a uniform set of allowed nutrition risk conditions, with corresponding code numbers, that relate to the various applicant priorities (e.g., pregnant women and infants receive priority over children). The CPA determines the applicant's risk factors based on the information provided by the applicant and using the priority and allowed risk conditions as a checklist. The CPA must document the risk factors in the applicant's file and sign as the authority making this determination. The three highest priority risk factors are needed for MDS reporting. The priority level data are used for program management purposes and for the FNS Report on Participation by Priority.

<u>Level 1</u>. Based on nutrition assessment anthropometric data, and the CPA's assessment of the applicant's nutrition status, the CPA would use the system to capture risk factors applicable to the participant. At least three risk codes are identified in order of highest priority and stored in the applicant's file. The system should capture the identity of the certifying official for audit tracking purposes. The system should prevent WIC staff who performs the eligibility assessment from issuing benefits to those same individuals. If the participant is not eligible, the system should capture the reason for ineligibility.

Level 2. The system should automatically calculate the date the participant's certification is due to expire<sup>12</sup>.

Level 3. At a higher level of automation, the system should automatically assign risk codes for each applicant based on the raw data (i.e., blood test results, height/weight measures, the foods consumed over a period of time, etc.) captured in the system<sup>13</sup>. Automation of this function enables the CPA to devote greater time and attention to the nutrition risk plan and appropriate nutrition interventions. Under special conditions, the CPA could override the risk code(s) assigned by the system.

<u>Level 4</u>. The system should support issuance of notification of certification information, notifying the applicant of certification and termination decisions and rights and responsibilities, and notifying the WIC staff of the next certification date.

# Input:

Nutrition Assessment Dietary Score

Nutrition Assessment Food Consumed Amount

Nutrition Assessment Food Consumed Date

Nutrition Assessment Food Consumed Type

**Nutrition Assessment Food Group** 

Nutrition Assessment Food Group Frequency per Day

Nutrition Assessment Food Group Score

Nutrition Assessment Infant First Supplemental Feeding

Participant Application Identification Number/ Participant Identification Number

Participant Certification Date

Participant Certification End Date

Participant Health Anthropometric Date

Participant Health Head Circumference

Participant Health Height/Length

Participant Health Hematocrit

Participant Health Hematocrit Date

Participant Health Hemoglobin

Participant Health Hemoglobin Date

Participant Health Nutrition Risk Criteria Code 1<sup>14</sup>

<sup>&</sup>lt;sup>12</sup> This is a core function.

<sup>&</sup>lt;sup>13</sup> This is a core function.

<sup>&</sup>lt;sup>14</sup> Nutrition Risk Codes are derived from data entered into the system during nutrition/ dietary assessment and bloodwork documentation.

Participant Health Nutrition Risk Criteria Code 2 Participant Health Nutrition Risk Criteria Code 3 Participant Health Weight Participant Ineligibility Reason Code Participant Priority Level Code

### **Process:**

- Accept CPA identity and post it to applicable certification sessions
- Retrieve data from Participant, Participant Health, and Nutrition Assessment data stores
- Enable entry of a Participant Nutrition Risk Code or automatically calculate the Participant Nutrition Risk Code based on Participant's Health and Nutrition data and store in the Participant Health data store
- Accept additional Participant Nutrition Risks and store in the Participant Health data store
- Automatically assign Participant Priority based on Participant Risk Factor and Participant Category, with the opportunity to allow staff to override the value, and store in the Participant Health data store
- Automatically update Priority based on status changes (e.g., infants reaching 1 year)
- Accept user input of new Participant Priority Level Code and store in the Participant data store
- Retrieve data from Participant data store
- Update Participant Certification Status Code to Certified and assign a Participant Identification number (if not already assigned) or update ineligibility/termination information
- System automatically calculates the next certification date and store in the Participant data store [calculated field Participant Certification End Date]. (Note: Under certain circumstances, the certification period may be shortened or extended by a period not to exceed 30 days.)

### **Output:**

Screen display of dietary/nutrition risk assessment Screen display of priority level Notification of next certification date Notification of ineligibility, if applicable

# 3.1.2.6 Assess Applicant for Temporary Certification/Presumptive Eligibility Requirements

<u>Level 1</u>. At the State agency's discretion, an applicant that meets all other eligibility criteria (including nutrition risk), but fails to bring proof of income to the certification appointment, may "self declare" their income, and may be given

one month of food benefits, with the requirement that they provide appropriate income documentation within 30 days. (See related section 3.1.1.6). Also, a pregnant woman who is income eligible and meets residential requirements may be certified without a nutrition risk assessment for a period of up to 60 days. If State agency policy permits the applicant to be certified temporarily or the pregnant woman to be presumptively eligible, the system should:

- Provide a notification that benefits will terminate if income documentation is not completed by a specific date (30 days from date of temporary certification for temporary certification and 60 days from date of certification for women deemed presumptively eligible).
- Flag the record to assist staff in obtaining the necessary documentation to avoid any disruption or termination of benefits.
- Limit food instrument issuance to one month until a proof of income has been provided for applicants who are temporarily certified and no more than 2 months for pregnant women who are deemed presumptively eligible.
- Automatically terminate those applicants who have not provided needed documentation within the appropriate timeframe<sup>15</sup>.

### **Input:**

Participant Certification Date
Participant Certification End Date
Participant Certification Status Code
Participant Identification Number
Participant Self-Declared Income Eligibility Code

### **Process:**

- Retrieve certification data from Participant, Participant Health, and Nutrition Assessment data stores
- Determine type of documentation missing from required certification data
- Accept user input of certification status code for temporarily certified or presumptively eligible and verify that the applicant is eligible to be classified for this status
- Calculate date documentation is required to complete certification
- Flag record to ensure that benefits cannot be issued for a timeframe greater than the approved timeframe for temporarily certified or presumptively eligible participants
- If documentation is not provided by the required date, the system should automatically terminate the participant

<sup>&</sup>lt;sup>15</sup> This is a core function.

### **Output:**

Screen display of participants that need to provide documentation
Screen display or printed report of participants automatically terminated
by the system because of missing certification data
Notice of ineligibility for temporarily certified applicants that fail to
bring in documentation within 30 days of certification.
Notice of ineligibility for pregnant women presumptively certified that
do not meet any risk conditions within 60 days of certification.

## 3.1.2.7 Conduct On-going Assessment of Bloodwork Needed

The blood test for anemia may be deferred for up to 90 days from the time of certification for applicants who have at least one qualifying nutrition risk factor present at the time of certification. If State agency policy permits bloodwork to be deferred for up to 90 days, the system should:

<u>Level 1</u>. Provide a notification to applicants that bloodwork is needed by a specific date (90 days from date of certification). Note: Applicants with missing bloodwork data should <u>not</u> be terminated by the system. The system should track the number of applicants, by category, with missing blood test data after the 90-day period has lapsed and summarize this information by local agency.

<u>Level 2</u>. The system should flag the records of applicants/participants needing bloodwork to assist staff in reminding applicants/participants to bring in bloodwork information.

<u>Level 3</u>. The system should automatically produce a notice to participant of bloodwork needed.

### Input:

Clinic Identification Number Local Agency Identification Number Participant Certification Date Participant Certification Status Code Participant Health Hematocrit Date Participant Health Hemoglobin Date Participant Identification Number

### **Process:**

 Retrieve bloodwork data from Participant and Participant Health data stores

- Calculate due date of bloodwork based on certification date and last bloodwork date
- Flag records in which bloodwork is missing within 90 days of certification

### **Output:**

Screen display or printed report of participants missing bloodwork Notice to participant of missing bloodwork

## 3.1.2.8 Maintain Participant Data

<u>Level 1</u>. Once the WIC staff determines an applicant is certified for the WIC Program, the user should enter any data on proxy, alternate, or authorized representatives who can pick up or redeem food benefits on the participant's behalf. (Note: This information can also be added after certification). The system should assign (or a user should input) a unique identification number for each participant and a unique family/household ID if more than one family/household member is participating in WIC. The identification number should be either a sequential number (the next sequential number available) or a coded number (e.g., the WIC Program may have special codes for the local agency the participant is certified with, or a code for the participant's category. Note that in this case, the identification number would need to change if the participant's category changes). The application identification number could be used as the participant identification number, or these numbers could be different. The WIC local agency will use this identification number to identify the participant when his or her records are needed. A family/household identification number would be assigned for the family/household and all individual participants in that family/household would be linked to the family/household identification number using their participant identification number.

### Input:

Participant Certification Status Code
Participant Family/Household Identification Number
Participant Identification Number
Participant Proxy Authorization Date
Participant Proxy Name

### **Process:**

- Automatically generate the Participant Identification Number (if system generated) or input number
- Automatically generate the Family/Household Identification Number or input an existing number
- Associate participant to the appropriate Family/Household Identification Number
- Accept user entered Proxy data
- Store Participant ID and Proxy data in Participant data store

# **Output:**

Screen display of proxy information

### 3.1.2.9 Issue Identification Card

Level 1. As an option for those State agencies that issue ID cards, the system should issue identification cards once applicants are certified in the WIC Program. The system should produce an identification card for use by participants (or their guardians/ caretakers) when receiving and using their food benefits and for proof of previous certification if the participant moves to another local or State agency. The identification card should include, at a minimum, the participant's name, participant identification number, certification expiration date and the participant's local agency identification. The system should issue a replacement identification card if the participant's card is lost or stolen. A control procedure, based on the participant identification card code, should be implemented to ensure that fraudulent cards are not produced.

<u>Level 2<sup>16</sup></u>. In an EBT/ESD environment, an EBT/ESD card is issued to the participant. The EBT/ESD card can be used as an electronic Verification of Certification Card (VOC) as well. To facilitate interoperability across states, standard data elements have been developed by FNS. (See Section 3.1.4 for more on use of electronic VOC functionality. See Data section for more information on electronic VOC data captured on EBT/ESD card.)

### **Input:**

Local Agency Identification Number Participant Card Replacement Date

1.

<sup>&</sup>lt;sup>16</sup> Please refer to FNS policy for EBT VOC requirements.

Participant Card Replacement Reason Code

Participant Certification Date

Participant Family/Household Identification Number

Participant Identification Card Number

Participant Identification Number

Participant Name-First

Participant Name- Last

Participant Name- MI

### **Process:**

- Using data contained in the Participant data store (including parent/guardian name for infants and children), the system should produce an identification card
- The system should track card replacements
- The system should flag records of participants with multiple card replacements for local agency follow-up

# **Output:**

Participant identification card

Report of participants with multiple card replacements

### 3.1.3 PRESCRIBE FOOD PACKAGE

Once the CPA has certified the applicant, he/she assigns a particular food package based on the nutrition risk of the participant. Functionality for maintaining food package data is included in the Food Benefit Issuance section.

The system should capture data about the participant's assigned food packages and schedule for picking up the food benefits. Because the nutritional health of participants may change over time, the WIC staff should be able to tailor/modify an individual participant's food package prescription at any time within the current certification period. The system should remind users when there is a change in a participant's status, which then necessitates a change in the prescribed food package.

## 3.1.3.1 Assess/Select Food Prescription

Level 1. The system should capture and store the prescribed food package for each participant consistent with the participant's categorical status and age. The system should recommend a generic food package based on the participant's category/age, which can be accepted or overridden by the certifying official. The system should display appropriate food packages (in addition to the recommended package) from which the certifying official can select a different package, if necessary. The system should produce a message to the WIC staff if an incorrect food package is prescribed (e.g., children's package for a woman). The system should allow the WIC staff to prescribe a different food package (including prorated packages) at any visit, and should flag over-issuance of benefits. Once a food package has been assigned to an individual participant, it is referred to as the participant's food benefit prescription. The food benefit prescription may change from month to month.

<u>Level 2</u>. At the State agency's discretion, the system should automatically change the prescription in some cases or flag the date the change should occur. For example, the system should automatically add cereal to an infant's package when the infant changes from 3 to 4 months of age. The system should automatically change formula quantities at a specific age.

Level 3. In an EBT environment, the system should still maintain the participant's food package identification. Instead of a set of paper food instruments, however, the participant would receive an electronic food prescription that contains the set of specific prescribed food items. Each prescribed food item has a food category, sub-category, amount, and unit of measure associated with it. At the time of benefit issuance, food prescriptions for individual family/household members should be aggregated into a family/household account. The family/household account contains individual food items with quantities that have been aggregated from all family/household participants' individual prescriptions.

# **Input:**

Food Package Identification Number
Participant Identification Number
Participant Special Formula/Medical Foods Received
Participant Special Formula/Medical Foods Received Reason Code

### **Process:**

- Accept user input of participant identification number
- Retrieve Participant's Category from Participant data store
- Display appropriate standard packages, in addition to recommended package
- Select Food Benefit Package based on Participant Category Code and display Food Package with assigned food items to user
- Alert user to inappropriate food package selection and flag for overissuance
- Accept user Food Package Confirmation or Food Package Change
- Update the Food Benefit Prescription data store to assign a Food Package to the participant

### **Output:**

Screen display of participant food package data Printed report of food benefits prescribed

# 3.1.3.2 Tailor/Change Food Prescription

State agencies vary in their approach to food item customization. Some State agencies prepare pro-rated standard food packages that are assigned when appropriate. An individual's food prescription would be tailored by substituting a new food package. Other State agencies reduce the quantity of food

items/instruments within existing food prescriptions. The degree to which a State customizes its food package varies from State to State.

State agencies also handle changes to food prescriptions differently. Some State agencies allow substitutions for specific food items within a food package, while in other State agencies a new food package is prescribed. In a paper system, when food prescriptions are changed, typically a new food package (with a different set of food instrument types) is substituted.

<u>Level 1</u>. The system should allow authorized users to tailor/change food benefits as necessary to meet participant needs. The system should allow deletion of food items or reduction of amounts of food items based on prorated pick-up schedules.

<u>Level 2</u>. In an EBT environment, food package tailoring is handled similarly to a paper environment within the system, although the changes in benefits would appear in a consolidated family food package, and, depending on the technology used for EBT/ESD, loaded to a card or maintained on-line at the EBT Processor. Thus, to tailor an individual food prescription in an EBT environment, either an entirely new food package could be associated with the food prescription or the individual food items associated with the prescription (or prescribed quantities of food items) could be modified.

### **Input:**

Food Benefit Prescription Identification Number Food Package Identification Number Participant Family/Household Identification Number Participant Identification Number

For each individual food item changed:

Food Instrument Type Identification Number

Food Item Category Code

Food Item Prescribed Date

Food Item Prescribed Identification Number

Food Item Prescribed Unit Quantity

Food Item Prescribed Unit Size

Food Item Subcategory Code

### **Process:**

Accept user input of participant identification and food package identification

- Retrieve and display existing Food Prescription
- Accept new Food Package selection and update Food Benefit Prescription with new Food Package Identification Number
- Alternatively, accept new Food Items/Quantities and update Food Item Prescribed data store and link to Food Benefit Prescription (in an EBT system) or to Food Instrument Type (in a paper system)

# **Output:**

Screen display of participant updated food prescription data Printed report of food benefits prescribed

## 3.1.3.3 Schedule Appointment for Food Benefit Pick-up

Most State agencies issue two to three months of food benefits at the time of certification. However, since certifications usually last from six months to one year, appointments are needed to pick up food benefits for future months.

<u>Level 1</u>. The system should maintain a schedule for food instrument pick-up. The system should allow the user to schedule the food benefit pick-up date and time to be the same as the participant's scheduled nutrition education class to encourage the participant to receive the education.

The system should associate the food packages and pick-up date for two or more participants from the same family/household using the pre-assigned family/household identification code<sup>17</sup>. The system should be capable of scheduling the day and time for the family's visit to the clinic for food benefit pick-up.

#### Input:

Clinic Identification Number

**Event Slot Date** 

**Event Slot Description** 

**Event Slot Identification Number** 

**Event Slot Maximum Number of Slots** 

Event Slot Type Code

Master Calendar Identification Number

Participant Family/Household Identification Number

Participant Identification Number

Resource Identification Number

Scheduled Appointment Date

\_

<sup>&</sup>lt;sup>17</sup> This is a core function.

# Scheduled Appointment Time

# **Process:**

- Accept user input of scheduling parameters and participant data for all family/household members
- Collect and store Appointment Schedule data in the Event and Scheduled Appointment data store
- Decrement number of slots available for the pickup appointment

# **Output:**

Screen display of appointment schedule availability Appointment notice for participant or family/household Daily schedule of appointments

#### 3.1.4 PROCESS PARTICIPANT CHANGES AND TRANSFERS

The system should capture and process changes, as necessary, to individual participant data and files. These changes could be to demographic data, family/household grouping, or participant status. The system should also accommodate transfers between local agencies within the State agency and from WIC Programs in other State agencies.

This functionality includes producing verification of certification (VOC) documents for transfers. In an EBT environment, the system should accept electronic VOC information via a card reader for in-State agency transfers or from other State agencies using an EBT or ESD card, if possible.

# 3.1.4.1 Change Family/Household Grouping

<u>Level 1</u>. The system should allow authorized users to change the family/household grouping of individual participants and to make other changes to participant data, as necessary. For example, a child may switch family/households. The system should allow the participant to be unlinked from his/her existing family/household grouping and be linked either to a different existing family/household grouping or an entirely new family/household grouping.

#### **Input:**

Participant Family/Household Identification Number Participant Identification Number

#### **Process:**

- Accept user input of participant identification number and family/household identification number and retrieve participant's existing Family/Household Grouping
- Display list of existing Family/Household Grouping
- Accept user selection of existing Family/Household Grouping or generate new Family/Household Grouping
- Link participant to selected/newly created Family/Household Grouping
- Update Participant data store with new Participant Family/Household Identification Number

## **Output:**

Screen display of participant's updated family/household grouping Screen display of changes to participant records

#### 3.1.4.2 Change Participation Status

Level 1. The system should allow authorized users to change the participation status of participants as necessary. A participant's status may change during the certification period for a variety of reasons including, but not limited to, income adjustments, expiration of eligibility period (e.g., reaching end of non-breastfeeding or postpartum period or upper age limit for child), moving out-of-state or misuse of WIC benefits. The participant's category may also change. The system should automatically change the participant's category when applicable (e.g., when an infant becomes 1 year old, when a pregnant woman delivers her baby and begins breastfeeding).

<u>Level 2</u>. When status changes occur, the system should automatically generate an appropriate notice of status change. For example, when an infant turns 1 year old and categorically changes from an infant to a child, a notice outlining the potential adjustments to the food package should be sent to keep the infant's caretaker fully informed. The system should remind the user of other changes needed due to status change, such as food package changes or termination notifications.

## **Input:**

Participant Category Code
Participant Identification Number
Participant Status Code
Participant Termination Date
Participant Termination Reason Code

#### **Process:**

- Accept user input of participant identification number and retrieve and display existing participant participation status or category
- Update Participant data store with updated status or category
- Add a record to or update an existing record in the Participant data store to show an applicant as ineligible or a participant's termination reason
- Notify user of food package changes due to status change
- Generate Notice of Participant Change

## **Output:**

Screen display with participant status change Notice of participant change

## 3.1.4.3 Process In-State Transfers

Level 1. WIC participants transferring between local agencies within a State agency should already be included in the State's system. Thus, when a transfer participant visits the new local agency, all data on the participant should already be available through the system. The data should be immediately accessible so services and benefits are not disrupted<sup>18</sup>. The staff at the participant's new location should be able to access the participant's file to find out what foods were issued at the former local agency and when they were last issued, as well as other information useful in providing continued health and nutrition-related services. The local agency will need to update demographic data on the participant (such as Participant Address and Participant Transfer To or Transfer From).

The specific process for performing in-state transfers will vary depending on the architecture of the system. Systems using a centralized database could simply change the authorization to access the participant records to the receiving clinic. Decentralized systems may require additional processing including the actual physical transfer of participant files from transferring agency to receiving agency and may not have immediate access to transfer data.

Where possible, a statewide database is highly desirable as it would enable local agency staff to easily transfer participants from one agency to another. The staff at the participant's new location would be able to access the participant's file to find out what foods were issued at the former local agency and when they were last issued, as well as other information useful in providing continued health and nutrition-related services<sup>19</sup>.

# Input:

Participant Family/Household Identification Number

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<sup>&</sup>lt;sup>18</sup> In a distributed system, immediate access to statewide participant data may not be available. In these cases, the Local Agency staff should contact the agency from which the participant is transferring to obtain the information required to immediately continue services. The participant's electronic record should be sent to the receiving local agency through the end-of-day update process.

<sup>19</sup> This is a core function.

Participant Identification Number Transfer Date Transfer From Transfer To

#### **Process:**

## At the Originating Agency

- Retrieve existing Participant or Family/Household data
- Create Transfer File and upload to Central Host
- Terminate Participant at Originating Agency
- Update Authorization to Access Records (centralized database only)

## At the Receiving Agency

- Receive Transfer File with participant data from originating agency
- Update Participant or Family/Household data store with participant information
- Update Authorization to Access Records (centralized database only)

#### **Output:**

Participant transfer file Screen display of transfer information

## 3.1.4.4 Process Transfers to Other States or Overseas

Level 1. The system should generate a VOC for every participant who is a member of a family/household in which there is a migrant farmworker or any other participant who is likely to be relocating during the certification period. When the participant relocates during a certification period, the receiving agency accepts the VOC as proof of eligibility and accepts the participant into the program immediately to avoid any disruption of service. Participants with a valid VOC are placed on WIC immediately ahead of all waiting list applicants, regardless of the priority status assigned to them at their previous agency. VOC information can be issued to a participant on a paper card or standard size paper. The card should list vital information about the participant currently participating with one State WIC agency but transferring to another in order to ensure the continuation of benefits.

<u>Level 2</u>. In a State agency with an EBT/ESD system, the EBT/ESD electronic card can serve as a VOC if the participant data format is standardized and the

participant is going to another EBT/ESD State agency that also uses the same standardized format. Further, the EBT/ESD systems in both the receiving and transferring States must be interoperable (i.e., have compatible operating systems and card readers). If not, the local agency should issue a paper VOC. (Contact FNS for EBT electronic VOC specifications.)

## **Input:**

Local Agency Address- City

Local Agency Address- State

Local Agency Address- Street

Local Agency Address- Zip Code

Local Agency Identification Number

Local Agency Name

Participant Certification Date

Participant Certification End Date

Participant Health Nutrition Risk Code(s)

Participant Identification Number

Participant Income Documentation Date

Participant Name- First

Participant Name- Last

Participant Name- MI

Transfer Date

User Name (user who conducted certification. This person must also sign the paper VOC)

## Other Data may be included on the VOC

Food Instrument Issuance Date

Participant Date of Birth

Participant Health Anthropometric Date

Participant Health Hematocrit

Participant Health Hematocrit Date

Participant Health Hemoglobin

Participant Health Hemoglobin Date

#### **Process:**

- Retrieve data from Participant, Participant Health, Transfer, Local Agency, and Food Instrument data stores
- Produce a VOC from data resident in the system

#### **Output:**

Verification of Certification (must be signed or stamped by Local Agency)

#### 3.1.5 ESTABLISH EBT/ESD ACCOUNT AND AUTHORIZE BENEFITS

As part of certification, the system should establish, or should provide the information to establish, ESD and EBT accounts. The system should have the capability to authorize the benefits to these accounts.

#### 3.1.5.1 Establish EBT/ESD Account

Level 1. Once certification is complete, the system should interface with an EBT/ESD processor (the EBT/ESD processor may be a private entity, if outsourced, or a state entity, if performed in-house) to transmit data and setup the EBT/ESD accounts. The system must transmit an account setup file for each participant, which includes relevant account information. In an EBT/ESD or ESD-only system, the account information may include demographic and health/nutrition information. The processor creates an account for each WIC family/household on its server. The specific information maintained in the account may vary depending on the implementation policies of the State EBT/ESD system. The system receives daily electronic reports from the processor of accounts established and account setup exceptions. The Food Benefit Family/Household Account Number should be either generated by the WIC IS or entered into the WIC IS when it is returned from the EBT/ESD Processor.

#### Input:

Food Benefit Family/Household Account Identification Number Participant Family/Household Identification Number Participant Identification Number

#### Process:

- Retrieve appropriate data from Participant data store
- Generate Food Benefit Family/Household Account Number (or receive and manually enter)
- Create Account Set-Up File
- Transmit Account Set-Up File to EBT/ESD Processor

## **Output:**

Account Set-Up File Screen display or printed list of participant accounts

#### 3.1.5.2 Authorize Benefits

<u>Level 1</u>. Once an account is set up, the system must transmit to the processor a benefit authorization file for each participant, which includes the food items prescribed for all family/household participants. Prior to sending the benefit authorization file, the system should aggregate individual participant prescriptions into a family/household account. Upon receiving this file, the processor posts authorized benefit quantities to appropriate EBT/ESD accounts. The system receives daily electronic reports from the processor of benefit authorizations processed and benefit authorization exceptions.

## **Input:**

Food Benefit Family/Household Account Identification Number

Food Benefit Prescription End Date

Food Benefit Prescription Estimated Price

Food Benefit Prescription Identification Number

Food Benefit Prescription Number of Months

Food Benefit Prescription Start Date

#### **Process:**

- Retrieve individual Food Prescriptions for each participant in a household
- Aggregate prescribed quantities for each food item
- Compile Food Package Prescriptions for all participants in household and update the Food Benefit Family/Household Account and the Food Family/Household Account Balance data stores (These data stores may reside both in the WIC IS and in the EBT/ESD Processor system or just at the EBT host depending upon the implementation strategy)
- Create Benefit Authorization File
- Transmit Benefit Authorization File with Food Benefit Household Account Balance information that provides a Consolidated Food List to the EBT/ESD Processor

#### **Output:**

Benefit Authorization File (Food Benefit Household Account and Food Benefit Family/Household Account Balance data)

#### 3.1.5.3 Load EBT/ESD Data on Card

<u>Level 1</u>. For EBT and/or ESD, the system should personalize the card. The participant selects a personal identification number (PIN) via a PIN pad. The

card is loaded with selected EBT/ESD data, and issued to the participant at this time. Cards may come from the vendor pre-personalized.

Although the specific workflow may vary from clinic to clinic, the issuance of EBT benefits is often treated similarly to the issuance of food benefits.

Consequently, for EBT participants, the card may be personalized and issued at this point with benefits loaded separately during benefit issuance. Alternatively, it may be more efficient to personalize, issue, and load the card all at once at the point of benefit issuance. Food benefits may be loaded to the card at the clinic or at the grocery store, depending on the State agency's EBT system design.

## **Input:**

Food Benefit Family/Household Account Card Primary Account Number Food Benefit Family/Household Account Participant Personal Identification Number Participant Identification Number

#### **Process:**

- Retrieve Card Personalization data from Participant and Food Benefit Family/Household Account data stores
- Perform PIN Selection
- Retrieve EBT/ESD data from Participant and Participant Health data stores
- Verify for adequate access privileges (e.g., input of both participant and user PIN)
- Write EBT/ESD data to card

#### **Output:**

Selected EBT/ESD data written to card (specific data depends on EBT/ESD system design specifications)

#### 3.1.6 CONDUCT CERTIFICATION REPORTING

The system should accommodate certification reporting. WIC staff should generate standard reports and ad hoc reports using certification data resident in the system.

## 3.1.6.1 Generate Standard Reports

Standard reports provide pre-defined data sets in a consistent format and can be requested through a report menu. These recurring reports can be displayed on the screen, printed in hard copy, or saved to a file for later printing or import into another software product. To allow for some limited customization of standard reports, the system may allow users to enter data selection or sort parameters to limit the scope of data included in the report or method of presenting the data. Standard certification reports include the following:

- <u>Appointment Listing by Date Report</u> Lists appointments scheduled for a certain date for use by local staff in managing resources.
- <u>Appointments Kept vs. Missed Summary Report</u> Report for use by local agency staff to track incidences of missed appointments.
- <u>Clinic Calendar Report</u> Provides a report or the clinic calendar, showing appointments, availability, and staff commitment.
- <u>Disqualified Participants Report</u> Needed for prevention of reenrollment and sharing with other WIC agencies during sanction period.
- <u>Dual Enrollment/Dual Participation Report</u> Lists matches of demographic information (i.e. name, address, sex, start/end dates of certification) that could potentially show dual enrollment or dual participation<sup>20</sup>.
- How Participant Heard About WIC Local Agency and State Summary

  Reports Lists how participants found out about the WIC Program to be used by agency staff to evaluate outreach efforts.
- <u>Ineligibility Summary Reports for Local Agency and State</u> Report of applicants deemed ineligible.
- <u>Migrant Participation Report</u> This report provides the average annual migrant participation (from July to June) for use on the FNS-798 form submitted in July<sup>21</sup>.

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<sup>&</sup>lt;sup>20</sup> This is a core function.

<sup>&</sup>lt;sup>21</sup> This is a core function.

- <u>Missed Appointments</u> Report of pregnant women who miss their first certification appointment. Should include contact information so that staff can try to reschedule/make contact.
- Outstanding Delayed Blood Work Report Lists outstanding blood tests for reference by local staff. They can then schedule the required bloodwork or remind the participant to bring in referral data by the specific due date.
- <u>Participant Local WIC Agency and State Summary Reports</u> Various participant summary reports at State and local levels.
- <u>Participant Services Summary Report</u> Summarizes WIC services provided to a participant.
- <u>Participant Source of Health Care Report</u> Report of the providers where the participant receives health/prenatal care.
- <u>Participant Summary Document</u> Summarized case information of a participant for reference by local staff.
- Participants by County and Municipality Local Agency and State Summary Reports – Lists participants by geographical grouping as specified (i.e. county, state, etc).
- <u>Pending Applications</u> Report of the applications that are not yet completed, certified, or determined ineligible.
- <u>Referrals from WIC to External Agencies Summary Report</u> Lists all referrals from a WIC agency to any external agency.
- Referrals from WIC to Outside Agencies Local Agency and State Reports Lists referrals of WIC participants to outside agencies.
- <u>Subsequent Certifications Due Summary Report</u> Report of participants in need of next certification visit.
- <u>System Access Log Listing Report</u> For security reasons, this report lists who has logged into the system during a specified period.
- <u>Termination Report</u> Report of all participants terminated from the program or found ineligible.
- <u>Upcoming Appointments Report</u> Lists upcoming appointments for use by WIC staff in order to schedule resources appropriately.
- <u>Upcoming High-Risk Appointments Report</u> Lists upcoming high-risk appointments for the use of WIC staff in order to schedule resources appropriately.
- <u>Waiting List Local Agency Report and State Summary Reports</u> Report of number of applicants on the waiting list and their priorities.
- <u>WIC Priority Participation Report</u> This report provides monthly participation by priority level. Categories are pregnant women, breastfeeding women, postpartum women, infants and children. This information is part of the Minimum Data Set. The priorities are:

- Priority I: Pregnant women, breastfeeding women and infants whose nutritional risk is attributed to a nutritionally related medical condition.
- Priority II: Infants not eligible in Priority I who are born of women who participated in WIC during their pregnancy or who did not participate but would have been eligible as Priority I participants.
- Priority III: Children whose nutritional risk is attributed to a nutritionally related medical condition. High risk postpartum women may also be placed in this priority.
- Priority IV: Pregnant women, breastfeeding women and infants who are at nutritional risk because of an inadequate dietary pattern or because of homelessness, migrancy or other predisposing risk condition.
- Priority V: Children who are at nutritional risk because of an inadequate dietary pattern or because of homelessness, migrancy, or other predisposing risk condition.
- Priority VI: Postpartum women at nutritional risk because of inadequate diet, homelessness, migrancy, or other predisposing risk condition.
- Priority VII: (State agency option): Previously certified participants who might regress in nutritional status without continued provision of supplemental food or pregnant women, breastfeeding women and infants at nutritional risk solely because of homelessness or migrancy.
- <u>WIC Program State Agency Participation and Expenditure Report (FNS 798)</u> This report provides monthly participation data, sorted by category and expenditure data, sorted by food and administration<sup>22</sup>.

# 3.1.6.2 Conduct Ad Hoc Queries and Generate Reports

The system should accommodate ad hoc reporting. WIC staff should be able to enter selection parameters and query the system. The system should display the results and generate reports.<sup>23</sup> In the certification functional area, examples of ad hoc queries include:

- List of participants on a particular food package
- Listing of High Risk Participants by Local Agency
- Listing of most commonly prescribed food packages
- Number and percentage of applicants referred to waiting list for a given period
- Number of migrant participants by month and average monthly migrant participation for July-June (for data submitted on the July FNS-798).
- Number of Participants Certified during a specified period

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<sup>&</sup>lt;sup>22</sup> This is a core function.

<sup>&</sup>lt;sup>23</sup> Ad hoc reporting is a future core function.

• Number of participants with a particular risk factor

#### 3.1.6.3 Maintain Data Warehouse

The system should transmit and store appropriate certification information to and from the certification data store to support certification reporting. Certification data from the Participant data store and the Participant Health data store should be incorporated into a WIC data warehouse. The data warehouse should be in the form of a data base management system (DBMS) to allow ad hoc reports and data analysis. The data warehouse could be used to generate multi-faceted trend analysis in the certification area including:

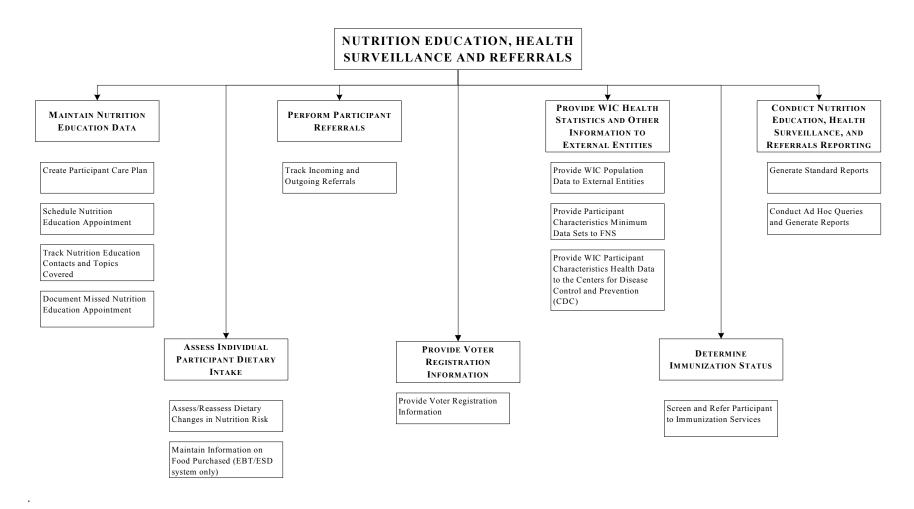
- Association between income status and anthropometric data
- Association between income status and risk factors
- Association between migrancy and specific risk factors
- Cross-Over population statistics across health and social service programs

# 3.2 NUTRITION EDUCATION, HEALTH SURVEILLANCE AND REFERRALS

The Nutrition Education and Health Surveillance functional area is intended to capture nutrition-related information about WIC Program participants. Data are collected through participant interviews, standardized health and nutrition education questionnaires, and diet evaluation tools during WIC certification periods. The nutrition education, health and referral data are assessed for individual participants, but may be used across populations. This information is needed for the Federal Participant Characteristics Datasets. This functional area also includes an interface with the Immunization Program. The automated functions that support nutrition education, health surveillance and referral are as follows:

- Maintain Nutrition Education Data
  - Create Participant Care Plan
  - Schedule Nutrition Education Appointment
  - Track Nutrition Education Contacts and Topics Covered
  - Document Missed Nutrition Education Appointment
- Assess Individual Participant Dietary Intake
  - Assess/Reassess Dietary Changes in Nutrition Risk
  - Maintain Information on Food Purchased (EBT/ESD system only)
- Perform Participant Referrals
  - Track Incoming and Outgoing Referrals
- Provide Voter Registration Information
- Provide WIC Health Statistics and Other Information to External Entities
  - Provide WIC Population Data to External Entities
  - Provide Participant Characteristics Minimum Data Sets to FNS
  - Provide WIC Participant Characteristics Data to the Centers for Disease Control and Prevention (CDC)
- Determine Immunization Status
  - Screen and Refer Participant for Immunization Services
- Conduct Nutrition Education, Health Surveillance, and Referrals Reporting
  - Generate Standard Reports
  - Conduct Ad Hoc Queries and Generate Reports

# WIC FUNCTIONAL REQUIREMENTS - FUNCTIONAL DECOMPOSITION DIAGRAM NUTRITION EDUCATION, HEALTH SURVEILLANCE AND REFERRALS



#### 3.2.1 MAINTAIN NUTRITION EDUCATION DATA

The WIC Program requires that local agencies offer nutrition education to all participants. This education covers a variety of topics and is provided through individual counseling and group classes. Nutrition education teaches participants the importance of the nutritious supplemental foods in their diets. WIC staff shows participants how to use prescribed foods in healthy ways, and provide information on other topics that will meet the participants' specific needs (e.g., the importance of breastfeeding).

The system should maintain the appointment schedules for participant nutrition education. Nutrition education sessions are often scheduled concurrently with food instrument pick-up to facilitate provision of nutrition education. The system should also track participant attendance at the various education classes.

# 3.2.1.1 Create Participant Care Plan

A participant care plan is provided based on need as determined by the CPA, or if requested by the participant. At each participant visit, a WIC staff member may perform health and nutrition monitoring activities that are recorded in the Participant Care Plan. This Plan is used to track the progress of the participant toward achieving his or her goals over time. It is also used to customize individual counseling sessions, plan nutrition education activities, and determine appropriate referrals.

<u>Level 1</u>. Based on the nutrition risk assessment data collected during the certification process, the system should have the capacity to generate an individual Participant Care Plan. The Plan should have the capacity to be updated for the participant at each clinic visit. Although the content of the Participant Care Plan is dependent on the category of WIC participant and may vary widely from State to State, it generally includes the following types of information:

- Nutrition and health goals for the participant
- Planned and attended nutrition education classes and individual counseling sessions
- Notes and comments added by WIC staff

- Results of nutrition risk assessments
- Referrals to other programs
- Results of individual health surveillance activities including ongoing anthropometric measurements, growth charts, and blood work changes
- Immunization status
- Planned frequency for follow-up
- Educational pamphlets and materials provided

<u>Level 2</u>. The system should have several care plan templates that it will automatically assign to participants that are in a certain risk category. The template will be built with business logic to provide the most applicable nutrition and health information for that participant's unique nutrition risks. Using the template, the nutritionist should be able to tailor the individual Participant Care Plan as necessary to meet the participant's unique needs.

## **Input:**

Comment Date

**Comment Description** 

Comment Identification Number

Education/Training Offer Class Code

Education/Training Offer Class Description

Education/Training Offer Date

Education/Training Offer Materials Provided

Education/Training Offer Status Code

Education/Training Offer Type Code

Participant Care Plan Create Date

Participant Care Plan High Risk Indicator

Participant Care Plan Identification Number

Participant Care Plan Nutrition Goal Date

Participant Care Plan Nutrition Goal Outcome Code

Participant Care Plan Nutrition Goal Outcome Date

Participant Care Plan Nutrition Goals

Participant Care Plan Template Type Code

Participant Category Code

Participant Health Height

Participant Health Hematocrit

Participant Health Hemoglobin

Participant Health Immunization Status

Participant Health Nutrition Risk Criteria Code(s)

Participant Health Weight

Participant Identification Number

Referral To

#### **Process:**

- Retrieve Participant Care Plan template appropriate for participant risk and category
- Retrieve relevant participant data from Participant data store and populate template
- Display populated Care Plan template
- Accept updates to Care Plan template
- Retrieve relevant data from Comment, Education/Training, Nutrition Assessment, Participant Health, Participant Care Plan, and Scheduled Appointment data stores
- Accept Participant Care Plan updates
- Display Participant Care Plan template and/or updated Participant Care Plan
- Update Comment, Education/Training, Nutrition Assessment, Participant Care Plan, Participant Health, Participant Health, and Appointment data stores

## **Output:**

Participant Care Plan

# 3.2.1.2 Schedule Nutrition Education Appointment

<u>Level 1</u>. The scheduling functionality (described in detail in Section 3.1.1.1 and Section 3.9) is critical in the Nutrition Education functional area. The scheduler can be used to create a master calendar of nutrition education classes for a local clinic, to schedule individual appointments, and to track the resources available to teach the class. Resources may include, for example, the availability of an educator (or nutritionist), training room, video equipment, or training materials.

When making appointments, the system should associate two or more WIC participants from the same family using a Participant Family/Household Identification Number to coordinate family appointment scheduling.

As local agencies maintain appointment schedules for nutrition education, the agencies may choose to track the availability of a particular date and time to ensure there is a slot available when scheduling an appointment. When slots become full, the system should notify the WIC staff of the overload. The system

should then allow the staff to change the time and/or date, or add the appointment if necessary.

### **Input:**

Education/Training Offer Class Code

Education/Training Offer Type Code

**Event Slot Date** 

**Event Slot Description** 

Event Slot Language Code

Event Slot Maximum Number of Slots

Event Slot Type Code

Participant Family/Household Identification Number

Participant Identification Number

Scheduled Appointment Date

Scheduled Appointment Time

#### **Process:**

- Assign resources available for conducting nutrition education class
- Check for appointment availability at particular time and date
- Coordinate appointment scheduling with other family members
- Collect and store appointment data in the Education/Training, Event Slot, and Scheduled Appointment data stores
- Decrement the Event Slot Maximum Number of Spaces each time a new appointment is made

## **Output:**

Screen display of local agency/clinic's nutrition education appointment schedule

Screen display of participant's nutrition education appointment schedule Notice to participant of nutrition education date, time, and topic

## 3.2.1.3 Track Nutrition Education Contacts and Topics Covered

Regulations require that the local agency offer adult participants and the parents or caretakers of infant and child participants, and wherever possible, the child participant themselves, at least two nutrition education contacts per certification; for parents/caretakers of infants certified until their first birthday, nutrition education contacts should be quarterly.

<u>Level 1</u>. The system should capture the nutrition education provided to each participant throughout the certification period as well as nutrition education

topics covered during nutrition education training<sup>24</sup>. In addition, the system should produce a report listing the number of nutrition education contacts to enable the WIC staff to know which participants need additional education contacts. The system should enable the WIC staff to update all family members' nutrition education data by accessing the family ID number.

<u>Level 2</u>. The system should automatically update the Participant Care Plan with the nutrition education provided.

## Input:

Education/Training Offer Class Code<sup>25</sup>

Education/Training Offer Class Description

Education/Training Offer Date

Education/Training Offer Materials Provided

Education/Training Offer Status Code

Education/Training Offer Type Code

Participant Care Plan Identification Number

Participant Family/Household Identification Number

Participant Identification Number

Scheduled Appointment Date

Scheduled Appointment Outcome Code

Scheduled Appointment Time

#### **Process:**

- Display Nutrition Education input screen
- Accept input of offered education/training and appointment outcome
- Update Education/Training and Participant Care Plan data store
- Display updated Nutrition Education screen

# **Output:**

Screen display and hardcopy report of nutrition education provided history

## 3.2.1.4 Document Missed Nutrition Education Appointment

<u>Level 1</u>. The system should capture data about each participant's educational activity, which can be provided one-on-one or in a class setting. In a group or class setting, the system should capture the educational activity, the scheduled

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<sup>&</sup>lt;sup>24</sup> This is a core function.

<sup>&</sup>lt;sup>25</sup> A Class Code for individual nutrition education may be established for States that do not hold group nutrition education sessions.

participants in the class, actual attendance, and the topics covered. Should a participant miss a nutrition education appointment, the WIC staff is required to document this fact in the participant's record. Because nutrition education is scheduled to coincide with benefit issuance (if possible), participants who miss nutrition education appointments need to be contacted to receive their benefits.

<u>Level 2.</u> The system should be able to create a no-show file to download to an auto-dialer to be used to generate follow-up calls.

<u>Level 3.</u> In an ESD environment, the participant's card may be swiped at the class to electronically update the Scheduled Appointment data store. The system should then produce a periodic report listing the attendance at each of the education classes to enable the local and State agencies to determine the more "popular" classes and those classes where improvement is needed.

### **Input:**

Education/Training Offer Class Code
Education/Training Offer Status Code
Education/Training Offer Type Code
Participant Family/Household Identification Number
Participant Identification Number
Scheduled Appointment Date
Scheduled Appointment Missed Reason
Scheduled Appointment Outcome Code
Scheduled Appointment Time

#### **Process:**

- Retrieve class roster or accept card input
- Update class roster with Participants' Attendance Status
- Generate no show report or no show file for auto-dialer system and generate follow-up calls
- Update Scheduled Appointment and Education/Training data stores
- Update Participant Care Plan with attendance status or education appointment missed reason for specific class

#### **Output:**

Screen display or report of participants who did not participate in nutrition education

Screen display or hard copy report of updated Participant Care Plan Screen display or hard copy report of nutrition education attendance

#### 3.2.2 ASSESS INDIVIDUAL PARTICIPANT DIETARY INTAKE

The WIC Program assesses each participant's dietary intake. The assessment of a participant's diet is important to determine nutrition risk. This assessment is important to the WIC staff to help determine nutrition education needs.

# 3.2.2.1 Assess/Reassess Dietary Changes in Nutrition Risk

<u>Level 1</u>. The system should capture and maintain data on dietary intake. In some State agencies, a dietary assessment is completed for the participant during certification if he or she was certified based on dietary risk; in other State agencies, a dietary assessment is done for all participants. If the dietary assessment is not done at certification, the nutritionist should determine how to collect the information regarding the participant's dietary intake (e.g., twenty-four hour recall or food frequency). Using this data, the system should identify participant diet status. The dietary intake can be compared, for example, to the food guide pyramid servings to make a dietary assessment.

<u>Level 2</u>. In order to assess dietary changes over time, the system should allow users to view historical data related to dietary intake trends across certifications. This allows the WIC staff or the system to analyze the effectiveness of the nutrition education and the supplemental foods that have been provided.

#### Input:

Comment Date

Comment Description

**Nutrition Assessment Dietary Score** 

Nutrition Assessment Food Consumed Amount

Nutrition Assessment Food Consumed Date

Nutrition Assessment Food Consumed Type

Nutrition Assessment Food Group

Nutrition Assessment Food Group Frequency per Day

Nutrition Assessment Food Group Score

Nutrition Assessment Infant First Supplemental Feeding

Participant Identification Number

Referral Date

Referral To Organization Code

#### **Process:**

- Retrieve Nutrition Assessment data from the Nutrition Assessment data store
- Accept updates to Nutrition Assessment
- Update existing participant records in the Nutrition Assessment data stores

#### **Output:**

Screen display of participant dietary assessment

# 3.2.2.2 Maintain Information on Food Purchased (EBT/ESD System Only)

Maintaining data on actual foods purchased will allow WIC staff to better tailor food packages to meet food preferences or to provide targeted nutrition education messages.

<u>Level 1</u>. In an EBT environment, the system should maintain information on which foods are purchased by the family/household. This function could be performed automatically using vendor redemption data that is transmitted both to the EBT Processor (for retailer settlement and reconciliation) and to the State agency. The food item level redemption data are used to update the family/household's record with actual purchase data. This data could generate reports for the nutritionist to use during counseling sessions.

<u>Level 2</u>. After review of the participant's actual food purchases, the WIC staff member may choose to update the Participant Care Plan to reflect new goals or a revised nutrition education strategy.

## **Input:**

In an EBT system, the following data easily could be downloaded from the State agency based on redemption information obtained from the EBT Processor:

Food Benefit Family/Household Account Card Primary Account Number Food Item Category Code

Food Item Subcategory Code

Food UPC/PLU<sup>26</sup> Code

Food UPC/PLU Description

Vendor Transaction Amount

<sup>&</sup>lt;sup>26</sup> PLU is the Price Look Up code.

Vendor Transaction Date

Vendor Transaction Detail File

# If necessary, updates to the Participant Care Plan can be entered:

Comment Date

**Comment Description** 

Education/Training Offer Class Code

Education/Training Offer Class Description

Education/Training Offer Date

Education/Training Offer Materials Provided

Education/Training Offer Status Code

Education/Training Offer Type Code

Participant Care Plan High Risk Indicator

Participant Care Plan Identification Number

Participant Care Plan Nutrition Goal Date

Participant Care Plan Nutrition Goal Outcome Code

Participant Care Plan Nutrition Goals

Participant Identification Number

#### **Process:**

- Receive Vendor Transaction Detail File and update local database Vendor Transaction Detail data store
- Display Participant Food Purchases
- Retrieve and display Participant Care Plan
- Accept updates to Participant Care Plan
- Update Participant Care Plan data store
- Generate Participant or Family/Household Food Purchases Report

## **Output:**

Screen display or hard copy report of participant family/household food purchases

Screen display or hard copy report of Participant Care Plan

#### 3.2.3 PERFORM PARTICIPANT REFERRALS

The WIC Program is required to provide WIC applicants and participants, or their designated proxies, with information on other health-related and public assistance programs (i.e., Medicaid, Food Stamp Program, etc.), and when appropriate, refer them to such programs. In addition, local agencies are required to maintain and make available for distribution to all applicants and participants, a list of local resources for drug and other harmful substance abuse counseling and treatment. WIC staff regularly receives applicants who have been referred from other programs or external organizations. The system is used to track referrals made to outside entities.

# 3.2.3.1 Track Incoming and Outgoing Referrals

<u>Level 1</u>. When a referral is made, the system should be used to record the name of the program to which the participant was referred<sup>27</sup>.

<u>Level 2</u>. The system should accommodate outgoing referrals by prompting the staff person to make the referral, by recording instances where an applicant was referred, and by recording the identity of the person making the referral. When a participant is referred to another health care/social service providing agency, the WIC staff member may want to update the Participant Care Plan.

<u>Level 3</u>. The system should track referrals and produce a report of the number of individuals referred to <u>and from</u> other programs. The types of agencies or programs that the system should consider for inclusion in referral tracking are:

- Battered Women's Homes
- Blood Lead Screening
- Child Abuse and Neglect
- Child Support Enforcement (CSE)
- Commodity Supplemental Food Program
- Drug Abuse Counseling and Treatment Centers
- Early and Periodic Diagnosis, Screening, and Treatment Program
- Even Start

-

<sup>&</sup>lt;sup>27</sup> This is a core function.

- Expanded Food and Nutrition Education Program (EFNEP)
- Family Planning Agencies
- Food Stamp Program
- Head Start
- Healthy Start
- Homeless Shelters
- Immunization Program
- Managed Care Agencies
- Maternal Health Program and Child Health Program
- MCH Social Worker
- Medicaid
- Migrant Organizations
- Physicians Organizations
- Private Providers
- School Lunch Program
- State Child Health Insurance Program (SCHIP or CHIP)
- State Programs for Children with Special Health Care Needs (CSHCN)
- Temporary Assistance to Needy Families

<u>Level 4.</u> A zip code matching or a more sophisticated Geographic Information System should be used to locate referral agencies within the proximity of the participant's location. The ability to generate more convenient referrals to agencies could potentially improve the utilization rate of the referral process.

<u>Level 5</u>. In an ESD environment, demographic and health data entered through other programs' systems, but carried on the card, is used to populate the system. Alternatively, data collected through the system could be written to the card and used to populate the agency's system to which the WIC participant was referred. The ESD card could carry appointment and referral information.

## **Input:**

Participant Address- Zip Code Participant Care Plan Identification Number Participant Family/Household Identification Number Participant Identification Number Referral Date Referral From Organization Code Referral To Organization Code

Optionally, the system can read other participant data from an ESD card.

#### **Process:**

- Accept user entered Participant Referral data
- Accept required location and match for referral agencies in close proximity
- Display list of agencies in close proximity and accept agency referral selection
- Update Referral data store
- Retrieve Demographic, Health, and Referral data from ESD Card and update system Participant, Participant Health, and Referral data stores (ESD only)
- Update ESD Card (ESD only)
- Retrieve and display Participant Care Plan
- Accept updates to Participant Care Plan and update Participant Care Plan data store
- Retrieve Referral Agency location information from Outreach data store, Referral data from Referral data store and Appointment data from Scheduled Appointment data store
- Update Referral Additional Information and Referral Referred By fields with appropriate data

## **Output:**

Referral notice
Referral transaction file

## 3.2.4 PROVIDE VOTER REGISTRATION INFORMATION

## 3.2.4.1 Provide Voter Registration Information

<u>Level 1</u>. As a service to participants, WIC provides voter registration information, forms, and the opportunity to apply to register to vote. The system should track the effort expended on these voter registration tasks and generate statistical reports of numbers of voter registration contacts made.

## **Input:**

Participant Identification Number
Participant Voter Registration Assistance Provided

## **Process:**

- Accept user input of participants offered voter registration services
- Create Voter Registration Report

# **Output:**

Voter registration report (to track staff time)

# 3.2.5 PROVIDE WIC HEALTH STATISTICS AND OTHER INFORMATION TO EXTERNAL ENTITIES

Under specified conditions, the State agency may share statistical data about the health status of WIC Program participants with other State health agencies.

Various health agencies collect statistical data from the WIC Program and other health agencies to consolidate, analyze, and produce larger-population results.

In addition, the State agency provides an electronic dataset to FNS for the Participant Characteristics (PC) Report. The PC Report has a Minimum Dataset (MDS) that includes data elements commonly collected on all participants. State agencies are encouraged to also provide the Supplemental Dataset (SDS) that has additional data elements. The datasets are extracted from the State agency data system every other year and should include all participants certified as of April of the report year. FNS uses this data to prepare a Report to Congress that describes the characteristics of all participants on the WIC Program.

MDS/SDS Data Element	FRED-E Data Element
MDS	
State Agency ID	[State specific IS]
Local Agency ID or Service Site	Local Agency Identification Number/
	Clinic Identification Number
Case ID (a unique number for each	Participant Identification Number
participant that maintains privacy)	
Date of Birth	Participant Date of Birth
Racial/Ethnicity	Participant Racial/Ethnic Code
Certification Category	Participant Category Code
Expected Date of Delivery or Weeks	Participant Expected Date of Delivery or
Gestation	Participant Health Infant Gestational Age
Date of Certification	Participant Certification Date
Sex	Participant Sex
Priority Level	Participant Priority Level Code
Participation in TANF, Food Stamp	Participant Adjunct or Automatic Income
Program, Medicaid	Eligibility Code
	-or-
	Participant Participation in Food Stamps
	Participant Participation in TANF
	Participant Participation in Medicaid
Migrant Status	Participant Residential Status
Number in Family or Economic Unit	Participant Family/Household Size
Family or Economic Unit Income	Participant Income per Period and
	Participant Income Period
Nutritional Risks Present at Certification	Participant Nutrition Risk Criteria Code
Hemoglobin or Hematocrit	Participant Health Hemoglobin or
	Participant Health Hematocrit
Weight	Participant Health Weight
Height	Participant Health Height/ Length

MDS/SDS Data Element	FRED-E Data Element
Data of Height and Weight Measure	Participant Health Anthropometric Date
Currently Breastfeed	Breastfeeding Infant Currently
-	Breastfeeding
Ever Breastfed	Breastfeeding Infant Ever Breastfeeding
Length of Time Breastfed	Breastfeeding Duration
Date Breastfeeding Data Collected	Breastfeeding Data Collection Date
Food Packages	Food Benefit Prescription Identification
	Number(s)
SDS	
Date of First WIC Certification	Participant Date of First Certification
Education Level	Participant Education Level Code
Number in Household on WIC	Participant Family/Household Size
Source of Prenatal Care	Participant Health Source of Prenatal Care
Date When Prenatal Care Began	Participant Date When Prenatal Care
	Began
Date Previous Pregnancy Ended	Participant Health Previous Pregnancy
	End Date
Total Number of Pregnancies	Participant Health Previous Pregnancy
Total Number of Live Births	Participant Number of Live Births
Pre-Pregnancy Weight	Participant Health Weight Prepregnancy
Weight Gain During Pregnancy	Participant Health Weight Prepregnancy,
	Participant Health Weight at Labor
Birth Weight	Participant Health Infant Birth Weight
Birth Length	Participant Health Infant Birth Length
Date of Last Routine Checkup or	Participant Date of Last Checkup/
Immunization	Immunization
Length of Time Mother on WIC During	Participant Mother's Time on WIC- Infant
Pregnancy	
Participation in the Food Distribution on	Participant Participation in the Food
Indian Reservations Program	Distribution on Indian Reservations
	Program

Each State agency is also strongly encouraged to provide these data sets to the CDC for their Pregnancy Nutrition Surveillance System (PNSS) and Pediatric Nutrition Surveillance Systems (PedNSS). The CDC produces national, state, and local (clinic, county, local agency, region, or metro area) reports on the health status of pregnant and breastfeeding women, infants, and children. The WIC Program data are a major source of information for these reports. By linking the FNS and CDC reporting efforts, both agencies can produce reports that inform interested parties of the health status of women and young children.

## 3.2.5.1 Provide WIC Population Data to External Entities

<u>Level 1</u>. The system should produce statistics on WIC participants for other State level (and local level) health agencies (e.g., Commodity Supplemental Food

Program, Head Start, Blood Lead Screening, etc.) to determine the overall health and nutritional status of individuals, specifically low-income, high-risk women and children. These statistics are compared to the national averages to pinpoint areas of the State/country that may have more individuals at risk and a greater need for WIC and other health programs.

# **Input:**

The inputs required will vary based on the data required from the external entity. Data provided to these entities should be resident in the system.

#### **Process:**

• Summarize and calculate various health statistics from system data stores

#### **Output:**

Various participant statistics report

## 3.2.5.2 Provide Participant Characteristics Minimum Data Sets to FNS

<u>Level 1</u>. State WIC Programs must provide the MDS to FNS with summary data about WIC participants for April of every other year<sup>28</sup>. States are encouraged to submit as much of the data requested in the supplemental data set as possible. This information is used to prepare a Report to Congress on the health and nutritional status of WIC participants. The data sets have specific parameters that are outlined in the FNS "Guidance for States Providing Participant Data."

#### **Input:**

These datasets are derived from data already resident in the Participant, Participant Health Breastfeeding, Food Benefit Prescription, and Local Agency or Clinic data stores. Please see the table in the beginning of Section 3.2.4 for a cross reference of FRED-E and MDS/SDS data elements

### **Process:**

• Summarize and calculate various health statistics from system data stores

## **Output:**

Participant Characteristics Minimum and Supplemental Data Set File for transmission to FNS

<sup>&</sup>lt;sup>28</sup> This is a core function.

# 3.2.5.3 Provide WIC Participant Characteristics Health Data to the Centers for Disease Control and Prevention (CDC)

<u>Level 1</u>. Most WIC State agencies provide the CDC with summary data about WIC participants for the PedNSS and PNSS reports. The system should produce a data file in the format needed by CDC. In return, CDC provides reports that the State agency can use to analyze the health status of participants in a particular geographic region (clinic county, local agency or metro area). The CDC reports are used by state and local agencies to identify and monitor health needs of the WIC population, support state and local WIC nutrition education planning efforts, evaluate program effectiveness, and justify security and redirection of resources.

## **Input:**

None needed, based on data already collected for the Participant Characteristics data sets. FRED-E data elements required for PNSS and PedNSS reports are identified in Section 4: Data.

#### **Process:**

• Summarize and calculate various health statistics from system data stores

#### **Output:**

Centers for Disease Control and Prevention statistics report or data file

#### 3.2.6 DETERMINE IMMUNIZATION STATUS

WIC's mission is to be a full partner in ensuring healthy and well-nourished women, infants and children. Low-income children are less likely to be immunized than their counterparts, placing them at high risk for potentially serious diseases, such as diphtheria, pertussis, poliomyelitis, measles, mumps, and rubella. WIC assists in the immunization effort by ensuring that WIC infants and children are screened and referred for immunizations using a documented immunization history record. In an ESD environment, the ESD card can maintain immunization histories (or act as a secure access mechanism to a webbased immunization record) to share across multiple providers and public health programs.

## 3.2.6.1 Screen and Refer Participant for Immunization Services

The centralized source of immunization data within State governments is often the Immunization Registry<sup>29</sup>. In some cases, the registries are maintained on the Internet. Due to time constraints in certifying participants, some WIC Programs are interested in finding an automated solution that would enable them to update the registry information, without the need for data entry on the part of the WIC staff.

When scheduling WIC certification appointments for children under the age of two, WIC staff advise parents and caretakers of infant and child WIC applicants that immunization records are requested as part of the WIC certification and health screening process. A documented record (i.e., a computerized or paper record in which actual vaccination dates are recorded) is used at initial and subsequent certifications to screen WIC participants. At a minimum, the WIC staff must screen for DTaP (diphtheria and tetanus toxoids and acellular pertussis) according to the following immunization schedule. If the infant/child is underimmunized, WIC staff refer the participant for immunization services, ideally to the infant/child's usual source of medical care.

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<sup>&</sup>lt;sup>29</sup> The data elements described in this document do not include all of the specific immunization data elements required to fully integrate with an immunization registry.

IMMUNIZATION SCHEDULE	
Age	Doses for an infant/child
By 3 months	At least 1 dose of DTaP.
By 5 months	At least 2 doses of DTaP.
By 7 months	At least 3 doses of DTaP.
By 19 months	At least 4 doses of DTaP.

<u>Level 1</u>. The WIC IS should be used to document that the participant was referred for immunization services, or the reason the participant was not referred. WIC staff should be able to print out, or download electronically, a list of participants for sharing with outside entities, as appropriate. The system should enable data to be sorted by date of referral, age of infant/child, reason referral not made, zip code, etc., or to select subsets of children for follow-up, if desired.

<u>Level 2</u>. For those WIC Programs with the resources and capability to help populate the immunization registries, data could be entered by the WIC staff into the WIC IS with an interface to the immunization registry. It is important that WIC not duplicate data maintained by the Immunization Program. A table driven assessment algorithm can be provided by the Centers for Disease Control and Prevention that assesses the immunization history, and indicates vaccine-specific, age appropriate status (up to date, due, or overdue). The WIC IS could be designed to provide outputs, including choice of letters, labels, phone list, report and parameters. An autodialer could be used to notify participants of immunizations due.

<u>Level 3</u>. For families that do not have a health care provider or health care home, either a zip code matching capability or a more sophisticated Geographic Information System could be used to locate potential agencies that could perform immunizations within close proximity of the participant's home.

<u>Level 4</u>. If multiple health care delivery agencies have integrated systems, the WIC staff could schedule an appointment at the receiving agency. Alternatively, the WIC staff could call to schedule the referral appointment and enter the time and date into the system. The Referral Notice in this case would contain information on the immunizations due for the participant being referred, the name and location of the agency to which the participant was referred, and the time and date of the immunization appointment, if available. The participant's

Immunization, Referral, and Scheduled Appointment data stores would be updated with the referral information.

<u>Level 5</u>. In the ESD environment, the participant card can transport data across various providers' systems. Immunization data are written to the card from one provider's system and the ESD card is then ready for use by the system. Immunization data read from the card is used to update the Immunization data store in the system.

## **Input:**

Participant Data Sharing Consent
Participant Data Sharing Entity
Participant Date of Birth
Participant Identification Number
Participant Health Immunization Status Code
Participant Sex
Referral Results
Referral To Organization Code

#### **Process:**

- Accept user input of immunization status, data sharing, and referral information and update Participant, Participant Health, and Referral data stores.
- Display list of participants by immunization status, using sort parameters.
- Generate lists of participants who have granted consent for sharing with outside entities.

# **Output:**

List of participants referred (with desired parameters) Electronic file on appropriate media for sharing Screen display of reason referral not made

## 3.2.7 CONDUCT NUTRITION EDUCATION, HEALTH SURVEILLANCE, AND REFERRALS REPORTING

The system should analyze data in the existing database to provide management information for each functional area in a variety of formats. The level of information required by the WIC Program may vary from simple recurring requests to complex data analysis. Information that is needed routinely by a large number of users can be most efficiently provided through standard reports. On occasion, WIC Programs may need to collect information that is not easily available through standard reports. Such requests may require the synthesis of data elements that are not typically associated. These queries are often one-time requests to answer specific questions. These "on-demand" requests for information are best addressed by an ad hoc query capability.

### 3.2.7.1 Generate Standard Reports

Standard reports provide pre-defined data sets in a consistent format and can be requested through a report menu. These recurring reports can be displayed on the screen, printed in hard copy, or saved to a file for later printing or import into another software product. To allow for some limited customization of standard reports, the system may allow users to enter data selection or sort parameters to limit the scope of data included in the report or method of presenting the data. The following standard reports are needed within the Nutrition Education, Health Surveillance, and Referrals function:

- Aggregate Health and Social Service Program Referrals Report –
  Display of frequency of referrals made and outcomes and referrals from
  other programs.
- <u>Nutrition Education Attendance Report</u> Report on attendance at specific class.
- <u>Nutrition Education Report</u> Report on specific class, related to certification period and as a percent of caseload, by group or individual contacts. Provides detail and summary information.
- <u>Participant Care Plan</u> A plan that maintains the progress toward attaining nutrition and health goals over time. It tracks various aspects of a participant's case history including nutrition education provided and attended, and referrals to other programs.
- <u>Participant Food Item Purchases Report (EBT only)</u> Report of a participant's food purchases compared to the food prescribed.

- <u>Participant Percentile Change Report</u> A tabular display of participant growth over time.
- <u>Participant Referral Report</u> List of participants referred and agency or program they were referred to.
- Report of High Risk Participants List of high risk participants. Should include high risk indicators to aid in follow up.
- <u>Voter Registration Report</u> Report of participants assisted in voter registration.
- WIC Program Participant Characteristics Minimum and Supplemental
   <u>Data sets for FNS</u> and the Reports for Centers for Disease Control and

   Prevention Data file for FNS and for CDC.

## 3.2.7.2 Conduct Ad Hoc Queries and Generate Reports

The system should allow the user to generate ad hoc reports.<sup>30</sup> The following are a few examples of the types of ad hoc queries that may be needed within the Nutrition Education, Health Surveillance, and Referrals function:

- Number of children under 2 years of age who are overdue on immunizations
- Number of participants who have been referred to programs who actually attended appointments at the referral agency

<sup>&</sup>lt;sup>30</sup> Ad hoc reporting is a future core function.

#### 3.3 FOOD BENEFIT ISSUANCE

The Food Benefit Issuance functional area captures and maintains information about WIC approved foods and food packages and the issuance of food benefits to WIC participants and reporting participation. The functions deal with preparing and issuing the food benefits, obligating funds, and handling the replacement of benefits. Two options are presented for the issuance of benefits—paper food instruments and EBT using an electronic card.<sup>31</sup> Although many functions are the same for both paper and EBT systems, there are some specific differences in method and terminology that are outlined in the functional descriptions.

Readers that are interested in a more comprehensive understanding of WIC EBT/ESD should refer to Appendix C prior to reading the requirements in this section. This will provide a more in-depth understanding of EBT/ESD and how these systems would operate in a WIC environment.

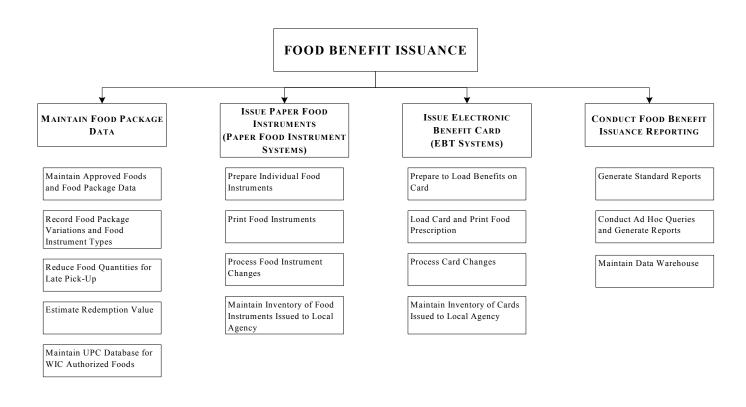
The functions for benefit issuance include the following:

- Maintain Food Package Data
  - Maintain Approved Foods and Food Package Data
  - Record Food Package Variations and Food Instrument Types
  - Reduce Food Quantities for Late Pick-Up
  - Estimate Redemption Value
  - Maintain UPC Database for WIC Authorized Foods
- Issue Paper Food Instruments (Paper Food Instrument Systems)
  - Prepare Individual Food Instruments
  - Print Food Instruments
  - Process Food Instrument Changes
  - Maintain Inventory of Food Instruments Issued to Local Agency
- Issue Electronic Benefit Card (EBT Systems)
  - Prepare to Load Benefits on Card
  - Load Card and Print Food Prescription
  - Process Card Changes
  - Maintain Inventory of Cards Issued to Local Agency
- Conduct Food Benefit Issuance Reporting
  - Generate Standard Reports
  - Conduct Ad Hoc Queries and Generate Reports
  - Maintain Data Warehouse

-

<sup>&</sup>lt;sup>31</sup> This document describes functionality using an electronic card; however, any technology that meets WIC Program requirements could be used.

# WIC FUNCTIONAL REQUIREMENTS - FUNCTIONAL DECOMPOSITION DIAGRAM FOOD BENEFIT ISSUANCE



#### 3.3.1 MAINTAIN FOOD PACKAGE DATA

The WIC Program designates approved foods that participants can purchase with WIC food instruments. To facilitate the prescription of foods to participants, standard food packages are defined in WIC Program regulations. Food packages are structured for each WIC category (e.g., pregnant, breastfeeding, and postpartum women, infants, and children) and the various packages developed for each category vary in their food content to address different nutritional requirements as well as cost containment considerations.

In a paper system, the approved foods included in each package are typically grouped into food instrument types. Thus, each food package consists of one or more food instrument types. A food instrument type may contain one or more specific approved foods. The foods identified for each food instrument type will include the food name (e.g., whole milk), a food unit size (e.g., 1/2 gallon) and a food unit quantity (e.g., three units). For infants, the food instrument usually identifies the brand, type of formula, and form of formula (e.g., Similac, milk-based, concentrate). Usually a State agency issues three to four food instruments per month to coincide with participant shopping patterns.

Some State agencies are using a matrix approach to food instrument design as opposed to the development of food instrument "types." In other State agencies, food instruments are assigned based on a profile of the participant. These approaches to food instrument design may be more conducive to EBT conversion.

When food prescriptions are issued, adjustments may be made for a variety of reasons. For example, if the participant is certified mid-month, the State agency may pro-rate the benefits initially and then adjust the prescription the following month so the participant may receive the full food package. In an EBT system, the food packages are aggregated for all participants in a family/household, and a list of foods is provided in the family/household food benefit account. When the participant shops, the quantity of foods purchased is debited from the family/household food benefit account.

To ensure that the participant purchases the proper food prescription at the grocery store, it is recommended that the State agency develop and maintain a Universal Product Code (UPC) database of approved foods. UPC's can be obtained from area retailers. It is highly recommended that State agencies provide this database file electronically to vendors, and request that they incorporate this feature in their store data systems. This provides the baseline data to develop a capability to support the current need to screen for unauthorized food purchases to reduce the incidence of food substitution. In a paper system, a similar UPC system is strongly encouraged for screening for eligible food purchases. Many vendors have voluntarily implemented such systems in the interest of integrity and streamlining the WIC checkout process.

The UPC database would include the food item, category/subcategory (e.g. milk-whole), package/container size and the corresponding UPC. In EBT systems, this database is used by vendors in their store scanning systems. When a WIC purchase occurs, the scanning system automatically flags any foods that are not WIC-authorized. It also captures food purchase data by UPC. FNS has developed a standard list of foods, categories and subcategories to support this function. This document, entitled "WIC UPC and Food Category Tables for EBT System Design," should be used to design this dataset.

## 3.3.1.1 Maintain Approved Foods and Food Package Data

<u>Level 1</u>. The system should capture information about the authorized foods approved for use by the State agency. The system should assign the various foods to food packages for different categories of WIC participants and different nutritional requirements within categories<sup>32</sup>. The system should support adding new foods and deleting foods from the list of approved foods and the corresponding changes to food packages. In general, data about WIC foods and food packages will be relatively stable.

#### **Input:**

Food Item Category Code Food Item Description Food Item Name

2

<sup>&</sup>lt;sup>32</sup> Food Item Category/Subcategory includes formula.

Food Item Standard Unit of Measure

Food Item Subcategory Code

Food Package Average Value

Food Package Food Instrument Type Quantity

Food Package Identification Number

Food Package Maximum Value

Food Package Name

Food Package Type Code

Participant Category Code

Participant Special Formula/Medical Foods Received

Participant Special Formula/Medical Foods Received Reason Code

#### **Process:**

- Add or update new approved foods and store in Food Item data store
- Add or update new approved food packages and store in Food Package data store
- Add or update special formula/medical foods received and reason in Participant data store

#### **Output:**

Screen display or report of approved food packages
Screen display or report of approved foods
Screen display or report of special formula/medical foods received

#### 3.3.1.2 Record Food Package Variations and Food Instrument Types

The food package prescription is usually composed of several food instruments, each containing a group of foods. The food instruments usually contain a week's supply of foods (e.g. two gallons of milk, one pound of cheese, two cans of juice, etc.). The majority of participants receive standard, pre-defined food instruments. However, sometimes the local agency must tailor the food package to accommodate food allergies, taste preferences, or for other reasons.

Level 1. The system should allow the certifying official to select a food package for issuance to a participant from a table of standard, pre-defined packages. However, the certifying official should have the flexibility to alter a standard package or develop a new package from scratch by quickly selecting food items from tables to construct the package. The system should prevent the user from

issuing foods that are disallowed or quantities of food that exceed the regulatory limit based on participant category<sup>33</sup>.

<u>Level 2:</u> The system uses a matrix to construct food packages. The participant category is identified as a row across the top of the matrix and the types of food are identified in a column on the side of the matrix. The grid is filled in with the quantity available for the particular type of food and category of the participant. Constructing food packages based on a matrix as opposed to the food instrument type approach may be helpful to State agencies when converting to EBT.

<u>Level 3:</u> Another way to construct food packages is to develop a food prescription "profile" as opposed to food instrument types. Certain characteristics for each type of participant are analyzed by the system to determine the best food package for that participant. For example, the system would construct a food package for a non-breastfeeding postpartum woman by taking into consideration whether this participant has special dietary needs, is a homeless person, and the participant's age.

## **Input:**

Food Instrument Type Category Code

Food Instrument Type Classification

Food Instrument Type Description

Food Instrument Type Identification Number

Food Instrument Type Name

Food Instrument Type Quantity Allowed

Food Item Standard Amount Prescribed

Participant Category Code

Participant Family/Household Identification Number

Participant Identification Number

#### **Process:**

- Display appropriate standard, pre-defined food packages
- Allow user to add or update new food instrument types and store in Food Instrument Type data store
- Prevent user from issuing foods that are disallowed or in quantities that exceed regulatory limits
- Display customized food package

-

<sup>&</sup>lt;sup>33</sup> This is a core function.

## **Output:**

Screen display or report of food instrument types

## 3.3.1.3 Reduce Food Quantities for Late Pick-Up<sup>34</sup>

WIC food packages are based on the nutrients a participant should consume over the period of a month. Program regulations allow an option of either issuing food instruments for the current month or the remaining portion of the month. However, for monetary reasons, State agencies are encouraged to prorate food instruments, i.e., reduce the benefits available when participants are certified mid-month or pick up their food instruments late. For State agencies that prorate food instruments, the system should reduce the food package based on the policy adopted by the State agency.

<u>Level 1</u>. The system should subtract the foods that the participant would have purchased and consumed if the instrument had been picked up on schedule. Depending on State agency policy, the amount of the reduction may depend on the number of days remaining from the pick up date until the expiration of the food instruments. The exact amount of the food reduction may also depend on the number of units and unit size of the prescribed foods.

#### **Input:**

Food Benefit Prescription Number of Days Late Food Instrument Type Days Late Food Instrument Type Identification Number Participant Family/Household Identification Number Participant Identification Number

#### **Process:**

- Enter the number of days late
- Select the appropriate food instrument type according to the number of days late or calculate reductions in the standard food items included in the food instrument based on number of days late

#### **Output:**

Pro-rated food instruments

<sup>&</sup>lt;sup>34</sup> Some States may elect to set up reduced quantity food packages that can be selected as part of the Tailor/Change Food Prescription function, as described in Section 3.1.3.2. In those cases, the issuance tasks would be the same as with a regular food package. This section focuses on the issuance activities that occur when States reduce food quantities during the issuance process.

## 3.3.1.4 Estimate Redemption Value

Prior to issuance to a participant, the State agency should assign an estimated redemption value to each food instrument or food instrument type. The system uses the estimated redemption value to project expenditures and as a cost containment tool to prevent a vendor from charging unreasonable prices.

<u>Level 1</u>. For paper food instrument systems, the system should obtain a historical redemption value for each food instrument type. Usually the estimated value is the average value of all redemptions for a food instrument type for a recent time period. For example, the price of a milk/cheese/juice food instrument type might have averaged \$15.00 for the last two months.

The State agency also assigns a maximum value to each food instrument. This is maintained in the system and food instruments that exceed the maximum value are rejected for payment. If the State agency uses a contract price for each food or food instrument, the contract price paid to the vendor cannot exceed the contract price. In such systems, the vendor is automatically billed for food redemptions amounts that exceed the contract price. The State may offset payments to the vendor or the vendor must submit repayments for the excess charged.

Thus, in a paper food instrument system, each time a food instrument is issued, the system uses the food instrument type average value or the projected average food cost to establish a food obligation for expenditure tracking purposes. It also assigns a food instrument type maximum value to ensure that the vendor does not overcharge for WIC foods.

<u>Level 2</u>. The system uses a matrix to derive standard food instruments instead of food types for the purpose of estimating redemption values. The matrix approach will allow for smooth transition from a paper system to an EBT system.

<u>Level 3</u>. In an EBT system, the actual cost for each food is obtained from the food transaction. The food transaction provides the cost of each food by UPC (e.g., General Mills Total cereal – 36-ounce box for \$3.50) and by vendor. This cost is stored by the system in the UPC database. Similar to a paper food

instrument system, the average cost for a food item, such as cereal, is computed based on purchases of all brands of cereals over a specific time period.

Each time a food prescription is issued in EBT, the system totals the food item average composite price for all of the food issued in the prescription to establish a food obligation for expenditure tracking purposes. The system may also assign a food item maximum composite price for cost containment purposes.

## **Input:**

Food Benefit Family/Household Account Redemption Value

Food Instrument Type Average Value

Food Instrument Type Category Code

Food Instrument Type Classification

Food Instrument Type Description

Food Instrument Type Identification Number

Food Instrument Type Maximum Price

Food Instrument Type Name

Food Instrument Type Quantity Allowed

Food Item Average Composite Price

Food Item Category Code

Food Item Inflation Factor

Food Item Maximum Composite Price

Food Item Maximum Quantity

Food Item Not to Exceed Composite Price

Food Item Subcategory Code

Participant Category Code

#### **Process:**

- For paper food instrument systems, retrieve the actual redemption value for each food instrument type over a period of time and calculate a Food Instrument Type Average Value
- Store the Food Instrument Type Actual Value in the Food Instrument Type data store
- Calculate a Food Instrument Type Maximum Value by inflating the Food Instrument Type Average Value
- Store the Food Instrument Type Maximum Value in the Food Instrument Type data store
- For EBT systems, retrieve the actual redemption value for each food UPC over a period of time
- Group all UPC prices together for each food item (e.g., For cereal all General Mills, Kellogg's, and store brand cereals) and calculate a Food Item Average Composite Price

- Store the Food Item Average Composite Price in the Food Item data store
- Calculate a Food Item Maximum Composite Price by inflating the Food Item Average Composite Price
- Store in the Food Item Maximum Composite Price Food Item data store

#### **Output:**

Screen display or report of food instrument type average and maximum values

Screen display or report of food item average and maximum composite prices

#### 3.3.1.5 Maintain UPC Database for WIC Authorized Foods

<u>Level 1.</u> For EBT systems, and optionally, for paper food instrument systems, the system should maintain a UPC database and provide this database to vendors. The State agency can also provide the vendor with a list of authorized foods and the vendor can maintain the UPC database. Appendix C (EBT/ESD) provides additional information on UPC database requirements.

FNS has developed a standard list of foods, categories and subcategories to support this function. This document, "WIC UPC and Food Category Tables for EBT System Design," should be used to design this dataset. The UPC database uses standard categories of WIC foods so that all State IS systems refer to the same food type with the same codes. The database identifies food items by Category Code (2-digit numeric code for each food item type, e.g. milk is 01), Sub-category (3-digit numeric code for each subcategory of a food item type, e.g. milk-whole is 001), Description (alpha description of the subcategory type), Unit (quart, ounce, can, bottle, dozen, pack), Comment (any special information needed), UPC for each food item under the Food Category/Subcategory, and UPC Description (food type, brand, unit size).

As new foods are authorized by FNS, FNS updates the Food Category Table and advises State agencies of the new food's category and sub category. It is important to note that of the universe of all foods authorized for WIC, each State agency selects a subset that is best for their particular program.

For EBT systems, this database is required to conduct the food purchase and obtain the price and food data needed to complete the transaction.

#### **Input:**

Food Item Category Code

Food Item Subcategory Code

Food UPC/PLU Authorization Date

Food UPC/PLU Code

Food UPC/PLU Description

Food UPC/PLU Vendor Specific UPC Average Price

Food UPC/PLU Vendor Specific UPC Maximum Price

Food UPC/PLU Vendor Specific UPC Not To Exceed Price

Vendor Identification Number

#### **Process:**

- Add, update and delete food UPC's and PLUs in the Food UPC/PLU data store
- Retrieve food transaction data and vendor prices for each UPC/PLU

## **Output:**

Screen display, report or electronic file for UPC/PLU food list, which displays the UPC/PLU, and description for each food category/subcategory

## 3.3.2 ISSUE PAPER FOOD INSTRUMENTS (PAPER FOOD INSTRUMENT SYSTEMS)

After certification is completed, the system prints the food instruments for each participant while the participant is present at the local agency. There are some circumstances that would merit advance printing of food instruments (such as to serve participants in rural locations with temporary clinics that do not have equipment to print food instruments on demand). However, advance printing is generally not recommended because of the potential costs of large numbers of food instruments that would be voided if participants do not show up at the clinic to pick up their food instruments as scheduled.

For advance printing, the system should print the food instruments in batch mode, and produce a food instrument register with space for the local agency staff to record the actual date of issuance, the staff member who issued the food instrument to the participant, and the participant's signature. The system also should provide a backup procedure for recording food instruments that are printed when the system is unavailable (e.g., due to unforeseen system shutdown).

The system must process any damaged/lost/stolen food instruments and support the replacement of food instruments. Many State agencies do not permit replacement of lost or stolen food instruments. In addition, local agencies must safeguard food instruments from fraudulent use. It is very important that the system maintains an inventory and provides records to the State agency to reconcile with the State agency food instrument inventory.

Finally, when the participant is issued food benefits, they are considered a "participant" for Federal reporting purposes. (Prior to food benefit issuance, the individual is considered an enrollee.) Infants who are exclusively breastfed are also counted as participants. The data are stored and later compiled for the FNS-798, WIC Financial Management and Participation Report.

#### 3.3.2.1 Prepare Individual Food Instruments

The printing of food instruments on demand requires the retrieval of the most recent food package prescribed for the participant during certification. Many

States advocate checking for dual participation or dual enrollment at food benefit issuance (see section for related 3.1.1.4 functional requirements). The prescription may include adjustments to the food package (i.e., reduced quantities) recorded in the system, if a participant is several weeks late in picking up his/her food instruments. Each food instrument issued (with the exception of prorated food instruments) is valid for one month. Depending on State agency program policy, the valid date is either a calendar month, or a month that starts with the issue date of the instrument. The local agency determines the number of months of food instruments to print (from one to three months) based on policy. Most local agencies elect to issue food instruments for more than one month to the participant. This reduces the number of trips the participant must make to the local agency and reduces local agency traffic.

Level 1. The system should allow WIC staff to prepare food instruments to print on-demand, i.e., when the participant arrives at the clinic to pick them up. To provide this capability, the system should prompt for the number of months of food instruments to be issued and prescribe the appropriate food package for each month. The system should assign the first valid date and last valid date for each food instrument issued<sup>35</sup>. The system should assign the maximum value corresponding to the food instrument type or standard food instrument issued. (The system should print this value on the food instrument if desired.) The system should prepare food instruments for all family/household members for printing/distribution to the family/household at the same time<sup>36</sup>.

<u>Level 2</u>. If the State agency uses a "vendor specific" system (i.e., the participant is required to choose a designated vendor where he/she will shop for WIC foods), the local agency must identify an authorized vendor acceptable to the participant and locate the vendor's identification number. The system must print the vendor identification number and vendor name on the food instrument.

<u>Level 3</u>. The system should aggregate food items and consolidate food instruments for all family/household members for printing and distribution to the entire family/household at the same time.

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<sup>&</sup>lt;sup>35</sup> This is a core function.

<sup>&</sup>lt;sup>36</sup> This is a core function.

#### **Input:**

Food Benefit Prescription Date

Food Benefit Prescription Identification Number

Food Instrument Issuance Date

Food Instrument Number of Months

Food Instrument Type Identification Number

Food Instrument Valid End Date

Food Instrument Valid Start Date

Food Item Prescribed First Date to Spend

Food Item Prescribed Last Date to Spend

Participant Family/Household Identification Number

Participant Identification Number

Vendor Identification Number

## If food item changes, enter the following:

Food Item Category Code

Food Item Prescribed Date

Food Item Prescribed First Date to Spend

Food Item Prescribed Last Date to Spend

Food Item Prescribed Unit Quantity

Food Item Prescribed Unit Size

Food Item Subcategory Code

### **Process:**

- Retrieve participant record and food package prescription data from Participant, Food Benefit Prescription, Food Package, and Food Instrument Type data stores
- Make food item changes to food prescription if requested and update Prescribed Food Item data store
- Select the vendor identification number corresponding to the name and address of the vendor selected by the participant (if vendor specific)
- Prompt the user to enter the appropriate number of months for each food package and calculate food instrument valid start and end dates for each month's issuance
- Retrieve food prescription information on other family/household members if food instrument printing is consolidated

## **Output:**

Screen display of food instrument issuance information to assure all information is correct.

#### 3.3.2.2 Print Food Instruments

When food instruments are actually issued to a certified applicant, the system recognizes the certified applicant as a "participant" in the month(s) for which the food instruments were issued, and adds this participant to the local agency participant count. (Exclusively breastfed infants may be issued a blank food instrument to ensure they are counted within the system as a participant.) In addition, the system automatically updates obligation data in the Obligations data store. For State management purposes, participation counts and estimated expenditures are crucial for many program management functions, and these data are also reported to FNS on the monthly FNS-798, WIC Financial Management and Participation Report.

<u>Level 1</u>. The system should print food instruments on demand. The system should support special password protection to ensure that only authorized employees have access to the input screens that support the printing of food instruments and should include time locks to prevent the printing of food instruments before or after clinic hours (authorized users should be able to override the time lock when necessary). The system also should retain internal records of all food instruments issued, including all information printed on the instrument, and the user identifier for the WIC employee who printed the instrument, to provide an audit trail.

<u>Level 2</u>. The system should ensure the appropriate food instrument stock is loaded in the printer. Laser printers with blank secure check stock can be used to prepare food instruments and print receipts. The system assigns and prints the serial numbers and the Magnetic Ink Character Recognition (MICR) line.

<u>Level 3</u>. The system should provide a food instrument register that lists the serial numbers of the food instruments issued so that the participant or proxy can sign as proof of receipt. The register also serves as reference for future food instrument reconciliation activities and as a record of any voided or unredeemed food instruments.

<u>Level 4</u>. In systems that use electronic signatures, it is possible for the participant to sign for instruments "electronically" and this signature is

maintained in the participant's electronic record. In such cases, a food instrument register is not needed.

#### **Input:**

Food Instrument Identification Number

Food Instrument Issuance Date

Food Instrument Number of Months

Food Instrument Pick Up Date

Food Instrument Printed Date

Food Instrument Type Average Value

Food Instrument Type Identification Number

Food Instrument Type Maximum Price

Food Instrument Valid End Date

Food Instrument Valid Start Date

Participant Family/Household Identification Number

Participant Identification Number

Vendor Identification Number [vendor specific states]

#### **Process:**

- Retrieve participant record
- Check that user has entered data for a valid participant and food package
- Verify that participant does not have any outstanding "active" food instruments. (For reissuance, the system should not allow new food instruments to be issued until previously issued food instruments are voided.)
- Confirm that the food instrument valid end date is based on number of days in the month of issuance or to the end of the calendar month
- Confirm that the proper maximum value is noted on the food instrument
- Update the count of participants for the month and store in the Participation data store for later reporting and management purposes
- Update the estimated food instrument redemption values for the month and store in the Obligation data store for later reporting and management purposes

#### **Output:**

Food instruments

Food instrument register

Updated participation count by local agency

Updated food obligations

Updated food instrument issuance file

## 3.3.2.3 Process Food Instrument Changes

Food instruments may be damaged, lost or stolen and need replacement. The benefit issuance process manages the replacement and accounting for food instruments in such situations. Many State agencies void these food instruments and do not reissue replacement food instruments to the participant. For those State agencies that replace food instruments, the system can support this function.

When food instruments are lost or stolen, it is possible the instruments will be fraudulently redeemed. Some State agencies notify the vendor, bank, or processor of food instrument numbers that should not be transacted.

<u>Level 1</u>. The local agency retrieves the participant record, voids the food instrument serial numbers issued to the participant, and assigns new food instrument numbers for the reissued instruments (see Print Food Instruments process above for reissuance details). The system should not allow new food instruments to be issued until the previously issued food instruments are voided.

<u>Level 2</u>. The system should maintain a history of food instrument losses in the participant's record. If the participant has several recurrent losses, the local agency may wish to take action, such as counseling.

#### **Input:**

Food Instrument Identification Number Food Instrument Void Date Food Instrument Void Reason Code Participant Identification Number

#### **Process:**

- Retrieve participant record
- Void food instrument serial/ identification numbers for damaged/lost/stolen food instruments and update the Food Instrument data store
- Deobligate the food instrument estimated redemption
- Prepare notification to vendors/ bank/ or processor with the food instrument serial/identification numbers to not transact
- Reissue and print food instruments with new serial numbers, if appropriate and update Food Instrument data store

#### **Output:**

Food instruments (if reissued)
Screen or report of food instrument loss history
Notice to vendor, bank, or processor of lost/stolen food instruments

#### 3.3.2.4 Maintain Inventory of Food Instruments Issued to Local Agency

<u>Level 1</u>. Because food instruments are negotiable instruments, the local agency must maintain an inventory to track receipt and disposition of all instruments by serial number. All food instruments are printed on a specially prepared paper stock. This stock is carefully controlled to ensure that all blank food instruments are fully accounted for and cannot be used to generate counterfeit food instruments. State and local agencies record all shipments and receipts of paper stock to local agencies to account for each blank instrument. [Note: State agency inventory of serialized and non-serialized items is discussed in Section 3.7.5.]

## **Input:**

Item Stock- Serialized Batch Beginning Serial Number
Item Stock- Serialized Batch Ending Serial Number
Item Stock- Serialized Date Received by Local Agency
Item Stock- Serialized Date Shipped to Local Agency
Item Stock- Serialized Food Instrument Serial Number
Item Stock- Serialized Food Instrument Stock Batch Number
Item Stock- Serialized Replenishment Date
Local Agency Identification Number

#### **Process:**

 Capture and record all food instrument stock received and update the Item Stock -Serialized data store

## **Output:**

Screen display or report of local agency food instrument inventory status

## 3.3.3 ISSUE ELECTRONIC BENEFIT CARD (EBT SYSTEMS)<sup>37</sup>

During the certification visit, an EBT/ESD family/household account was initially established and all of the food prescriptions for the WIC participants in the family/household were consolidated on one food list. In the benefit issuance stage, additional data pertaining to the food benefit issuance is input and the family/household and food package data are loaded onto the card, in an off-line system. In an on-line system, the Primary Account Number (PAN) to use to access the benefit account is loaded to the card at the time of card issuance. Benefits are transmitted to the participant's WIC EBT account at the EBT Processor.

In some instances, the loading of the card may take place at the vendor instead of the local agency. This would usually be done to replenish the second month benefits if a participant chooses not to load benefits at the WIC clinic. In this case, the local agency would complete steps similar to those discussed below, but the actual loading of the food benefits would occur when the participant uses his/her card at the vendor.

The system must process any damaged/lost/stolen cards and support reissuance of cards. Due to the cost of replacing cards, State agency policy may vary regarding replacement, particularly if the card is shared with other programs. But in most cases, as long as the participant does not have a history of lost cards, the local agency will reissue a card with the balance of the family/household's benefits. In addition, local agencies must safeguard cards from fraudulent use. It is very important that the system maintains an inventory and provides records to the State agency to reconcile with the State card inventory.

Finally, when the participant is issued food benefits, they are considered a "participant" for Federal reporting purposes. The data are stored and later compiled for the FNS-798, WIC Financial Management and Participation Report.

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<sup>&</sup>lt;sup>37</sup> There are various approaches to EBT for WIC. This document does not endorse one technology alternative, but provides functional requirements based on a common approach used by States that have begun the WIC EBT process.

## 3.3.3.1 Prepare to Load Food Benefits on Card

The system should retrieve the participant certification record or family/household account that contains the participant information and prescribed food package including any adjustments to the food package recorded in the system to reflect late pick up of the benefits. If the participant decides to make an alternative food selection, the food package information is updated to reflect her preference. Information is retrieved on any designated proxy, alternate or authorized representative who is allowed to receive or use the card.

If the State agency uses a "vendor specific" system that requires that a participant choose a designated vendor where he/she will shop for WIC foods, the local agency must identify a vendor acceptable to the participant and input the vendor's identification number so that the system can load the vendor identification number on the card.

Each prescription loaded onto the card (with the exception of prorated benefits) is valid for one month. Depending on State program policy, the valid date may be either a calendar month, or a month that starts with the date of issuance. The number of months of benefits is determined (from one to three months) based on the participant situation, and any adjustments to the food package made (e.g. if the participant decides they want to substitute another type of food). Most local agencies elect to issue benefits for more than one month to the participant. This reduces the number of trips the participant must make to the local agency and reduces local agency traffic.

<u>Level 1</u>. In the EBT environment, the EBT card is personalized before loading benefits. The preparation of the card includes personalizing the card and allowing the participant to select a confidential PIN. This ensures that only she or her designated proxy can use the card to obtain benefits at the vendor. The card face may be printed with appropriate information (e.g. family/household name)<sup>38</sup> and given to the participant.

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<sup>&</sup>lt;sup>38</sup> WIC is not required to print the family/household name on the face of the card. Printing the family/household name on the face of the card is not a Food Stamp EBT regulation, but it is a Quest<sup>®</sup> operating rule, and has been adopted by about half of the Food Stamp EBT States.

Electronic cards usually have a Primary Account Number (PAN), which the system captures from the card or the user inputs. Part of this number is used by the banking system to route transactions for payment. The cards may also have a serial number for inventory tracking purposes (the PAN may also be used for this purpose). The system should maintain a card inventory by these serial numbers. The user who issues the card should also input their identification code.

The system should prompt for the number of months of benefits to be issued and prescribe the appropriate food package for each month. The system should assign the first valid date and last valid date based on the date of issuance.

## Input:

Food Benefit Family/Household Account End Date

Food Benefit Family/Household Account Identification Number

Food Benefit Family/Household Account Number of Months of Benefits

Food Benefit Family/Household Account Start Date

Food Benefit Family/Household Card Primary Account Number

Food Benefit Prescription Date

Food Item Prescribed First Date to Spend

Food Item Prescribed Last Date to Spend

Participant Family/Household Identification Number

Participant Identification Number

Vendor Identification Number

## For Changed Food Items:

Food Benefit Prescription Identification Number

Food Item Category Code

Food Item Prescribed Date

Food Item Prescribed First Date to Spend

Food Item Prescribed Identification Number

Food Item Prescribed Last Date to Spend

Food Item Prescribed Unit Quantity

Food Item Prescribed Unit Size

Food Item Subcategory Code

## **Process:**

- Retrieve the family/household account information including any demographic and proxy information from the Food Benefit Family/Household Account and Participant data stores
- Prompt the participant to choose a PIN, verify, and update the Food Benefit Family/Household Account data store

- To make food changes, accept input food changes and update the Food Benefit Prescription and Prescribed Food Item data stores
- Recalculate the Food Benefit Family/Household Account Balance aggregated food item prescribed amounts (i.e., subtract from food items taken away, add to food items increased, and add new food items) and update the Food Benefit Family/Household Account Balance data store
- Retrieve aggregated food items from the Food Benefit Family/Household Account Balance data store
- If it is a vendor specific system, input the vendor identification number corresponding to the name and address of the vendor selected by the participant
- Prompt for the number of months of aggregated benefits for the family/household and assign the appropriate first and last date to spend to the prescribed food items
- Update the Food Benefit Family/Household Account data store
- Calculate the estimated redemption value obligation for the foods in the prescription based on the prices maintained in the Food/UPC data store.

#### **Output:**

Screen display of participant and food data to be loaded on the card

## 3.3.3.2 Load Card and Print Food Prescription

Level 1. Once all the proper data are entered, all family/household data are loaded on the card from the local agency's card reader/writer. The participant is also provided with a hard copy of the family/household's food prescription list so she has a reference for shopping. The system should provide a daily register of card PANs issued to family/households and the participant should sign the register to document they have received cards. This listing also serves as reference for future card inventory activities. When food benefits are actually issued to a certified applicant, the system should recognize the certified applicant as a "participant". For State management purposes, participation counts are crucial for many program management functions, and this participation count is also reported to FNS on the monthly FNS-798, WIC Financial Management and Participation Report. Note: The system should support special password protection to ensure that only authorized employees have access to the input screens that support the issuance of cards. Also, the system should include time locks to prevent the issuance of cards before or after clinic hours.

<u>Level 2</u>. In systems that use electronic signatures, it is possible for the participant to sign for the card "electronically" and this signature is maintained in the participant's electronic record. In such cases, a card register is not needed.

## **Input:**

Food Benefit Family/Household Account Card Primary Account Number Food Benefit Family/Household Account Obligation Value Food Benefit Prescription Identification Number Participant Family/Household Identification Number Participant Identification Number

#### **Process:**

- Insert card into reader/writer
- Prompt system to download family/ household account data onto card
- Update and store the new estimated redemption value obligation for the family/household food benefit prescription in the Food Benefit Family/Household Account data store
- For all participants within the family/household account, update the count of participants for the month and store in the Participation data store for later reporting and management purposes

## **Output:**

Food benefits received register/printed copy of food list Register of cards issued Updated count of participants for the local agency

#### 3.3.3.3 Process Card Changes

Cards may be damaged, lost or stolen and need replacement. In such cases, the local agency would retrieve the family/household record, void the card PAN issued to that family/household, and assign a new card PAN for the family/household's benefits. The local agency should review the family/household's card loss history to determine if there are chronic problems. If there are past problems, the local agency can decline to reissue the card in conformance with the applicable State agency policy. If particular local agencies are showing recurrent losses, the State agency may wish to investigate the reasons and possible solutions for the high loss rate.

When cards are lost or stolen, it is possible the card will be fraudulently used. State agencies must notify the EBT processor of card PANs that should not be transacted. If a vendor attempts to complete a transaction with a "hot" card, the processor's system will recognize the invalid PAN and terminate the transaction.

<u>Level 1</u>. The system should load the balance of the family/household's benefits on the card. The system should also maintain a history of card losses in the family/household's record and aggregate this data into a file for the local agency.

## **Input:**

Food Benefit Family/Household Account Card Primary Account Number

Food Benefit Family/Household Account Identification Number

Food Benefit Family/Household Account New Primary Account Number

Food Benefit Family/Household Account Old Primary Account Number

Food Benefit Family/Household Account Participant Personal Identification Number

Food Benefit Family/Household Account Start Date

Food Benefit Family/Household Account Void Date

Food Benefit Family/Household Account Void Reason Code

#### Process:

- Retrieve the family/household record
- Void card PAN for damaged/lost/stolen cards and update Food Benefit Family/Household Account old PAN with the entered card PAN for the lost/damage/stolen card
- Assign new card PAN
- Update the Food Benefit Family/Household Account data store with new PAN
- Retrieve family/household account data from Food Benefit Family/Household Account and Participant data stores or from the EBT processor
- Retrieve remaining balance for each food item from Food Benefit Family/Household Account Balance data store
- Prompt the participant to choose PIN, verify
- Personalize new card, load balance of benefits, and issue new card

#### **Output:**

Screen display of void and updated information Screen display or report of family/household card loss history

## 3.3.3.4 Maintain Inventory of Cards Issued to Local Agency

<u>Level 1</u>. Since cards are negotiable instruments, the local agency must maintain an inventory to track receipt and disposition of all cards by serial number. The

local agency should record all shipments and receipts of cards and account for the cards replaced. [Note: State agency inventory of serialized and non-serialized items is discussed in Section 3.7.5.]

## Input:

Food Instrument Destruction Date

Item Stock-Serialized Batch Beginning Serial Number

Item Stock-Serialized Batch Ending Serial Number

Item Stock-Serialized Card Stock Batch Number

Item Stock-Serialized Card Stock Serial Number

Item Stock-Serialized Date Received by Local Agency

Item Stock-Serialized Date Received by State Agency

Item Stock-Serialized Date Shipped to Local Agency

Item Stock-Serialized Last Modified Date

Item Stock-Serialized Last Modified User

Item Stock-Serialized Replenishment Date

Local Agency Identification Number

User Identification Number

#### **Process:**

 Capture and record all item stock received and update Serialized Item Stock data store

## **Output:**

Screen display or report of local agency card inventory status

#### 3.3.4 CONDUCT FOOD BENEFIT ISSUANCE REPORTING

Food benefit issuance reporting should include routine reports on authorized foods, authorized food packages, listings of food instruments issued and estimated redemption value, and listings of cards voided.

### 3.3.4.1 Generate Standard Reports

Standard reports provide pre-defined data sets in a consistent format and can be requested through a report menu. These recurring reports can be displayed on the screen, printed in hard copy, or saved to a file for later printing or import into another software product. To allow for some limited customization of standard reports, the system may allow users to enter data selection or sort parameters to limit the scope of data included in the report or method of presenting the data. Benefit issuance should result in several ongoing reports that are used to describe food packages and account for benefits issued. Some reports are needed for both paper and EBT systems. Other reports are specific to a paper or EBT system. The standard reports are:

## Reports for Paper and EBT Systems

- <u>Approved Food Packages</u> This report would list and describe the foodpackages for each category of participant.
- <u>Approved Foods</u> This report would list and describe all foods authorized for use in the State agency's WIC Program. This will include approved formulas.
- <u>Food Price List</u> This report would list all approved foods and their maximum prices allowed.
- Participants to Date by Local Agency This report would list all participants issued food benefits for the month to date.
- Rebate Report Lists all redeemed foods that are eligible for a rebate (e.g., infant formula or infant cereal)
- Special Formula/Medical Foods Received This report would list participants who are receiving special formula/medical foods and the reason.
- <u>UPC Database for WIC Authorized Foods</u> This report would list and describe all foods with their UPCs that are authorized for issuance according to the standard category/subcategories. The system should provide a hard copy and electronic file.

## Reports for Paper Systems

- Estimated Food Instrument and Maximum Values This report would provide data on the estimated value for each food instrument type and the maximum value for that food instrument.
- <u>Estimated Redemption Value for Food Instruments Issued</u> This report would list by month of issue, all food instruments issued and their estimated redemption value. The system should array the data by local agency and total for the State agency.
- <u>List of State Approved Food Instrument Types</u> This report would list all food instrument types.
- <u>Local Agency Food Instrument Inventory Status</u> This report would provide data on the food instrument serial numbers assigned to each local agency. It would also identify the status of each food instrument as unissued, redeemed or void.
- <u>Lost And Stolen Food Instruments By Local Agency</u> This report would provide a list of food instruments that are reported as lost or stolen.

#### Reports for EBT Systems

- <u>Estimated Food Redemption Values</u> This report would provide data on the estimated value for each food type.
- Estimated Redemption Value for Family/Household Food Accounts This report would list by month of issue, all foods issued and their estimated redemption value. The system should array the data by local agency and total for the State agency.
- <u>Local Agency Card Inventory Status</u> This report would provide data on the card serial numbers assigned to each local agency. It would also identify the status of each card as unissued or void.
- <u>Lost and Stolen Cards by Local Agency</u> This report would provide a list of cards that are reported as lost or stolen.
- <u>Lost and Stolen Cards by Participant</u> This report would provide a list of cards that are reported lost or stolen by participant.
- Monthly Food Obligations and Redemption Report This report lists monthly food obligations (by food category/subcategory) versus monthly food redemptions (by food category/subcategory) by local agency.
- <u>WIC Family/Household Monthly Benefit Report</u> This report would list the issued food benefits (by food category/subcategory) versus the redeemed food benefits (by food category/subcategory) by month.

## 3.3.4.2 Conduct Ad Hoc Queries and Generate Reports

The system should enable the user to generate ad hoc reports.<sup>39</sup> Benefit issuance data provides a great deal of data on the types of foods available and what food benefits were actually issued. Ad hoc reporting could provide information that identifies particular patterns at local agencies, or overall trends for the State agency such as arraying the number of months benefits issued by number of family/households to assess how many participants are scheduled for monthly versus multi-month benefits or to sort foods or food instrument types by estimated redemption values. Example of ad hoc reports might include:

- Card loss rate among local agencies
- Number of food instrument types issued by participant category
- Participant category and number of months benefits issued

#### 3.3.4.3 Maintain Data Warehouse

In the Food Benefit Issuance functional area, the data warehouse should contain appropriate approved WIC food data, food package data, food instrument or card issuance data, and family/household prescription data.

Examples of the use of the data warehouse in the Food Benefit Issuance functional area are:

- Characteristics of participants with high food instrument/card loss rates
- Factors affecting popularity of specific food packages at different times of the year
- Impact of food prices on designation of WIC authorized foods
- Patterns of benefit issuance by times of year and locations of the State

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<sup>&</sup>lt;sup>39</sup> Ad hoc reporting is a future core function.

### 3.4 FOOD BENEFIT REDEMPTION, SETTLEMENT AND RECONCILIATION

The Food Benefit, Settlement and Reconciliation functional area covers the redemption of food benefits at the vendor, payment to the vendor, and accounting for the disposition of food benefits issued to the participant. Functions for both a paper food instrument system and an EBT system are included.

Within a paper food instrument system, the redemption, payment and settlement of food instruments can vary significantly. Some State agencies use "check systems" in which the food instrument is a check with MICR-encoded data for the food instrument serial number, vendor ID and redemption value. The participant exchanges the check for WIC foods at the vendor, and the vendor submits the check for payment through the banking process. Other State agencies use "voucher systems." In a voucher system, the participant exchanges the voucher for WIC foods at the vendor, and the vendor submits the vouchers to the State agency for payment.

To protect the integrity of the program, the following requirements apply to the transaction of checks or vouchers at the grocery store:

- The vendor can redeem only the specific foods and quantities printed on the food instrument, and the selection of foods must meet the State agency's approved food list (e.g., only specific brands and types of orange juice are approved and orange drink is an unacceptable selection).
- Only the participant named on the food instrument, or a designated proxy, can redeem the food instrument, and the vendor must verify the signature.
- The participant can use the food instrument only within the valid dates printed on the food instrument and the vendor must submit the food instrument for payment within a specified time period.
- The vendor cannot alter or change the price entered on the food instrument.
- The cashier must enter the price for the food instrument at the point of sale.
- The price may not exceed a maximum value established by the State agency for valid redemption.
- Only a WIC authorized vendor can redeem food instruments.
- If all foods on the food instrument are not in stock, the vendor cannot substitute a "rain check" or cash.

• The identity of the vendor redeeming the food instrument, such as with the use of an authorized vendor stamp, must be clearly identifiable on the check or voucher<sup>40</sup>.

Regardless of whether a paper or EBT system is used, the cashier should screen for approved foods at the point of sale. If the vendor uses a scanning system, the UPC identifiers for WIC foods can automate the screening process. Otherwise, the cashier is responsible for ensuring the participant only purchases approved foods in the quantities prescribed. Some State agencies also require the cashier to record the date of sale on the food instrument.

In check systems, a "post-edit" screen is usually performed after the vendor is paid. If errors are found, the vendor is billed for any food instruments that were invalidly transacted. In voucher systems, a "pre-edit" screen is usually performed before the vendor is paid, and the vendor is only paid for valid food instruments. The vendor is notified of any food instruments that were not paid and the reason, and given an opportunity to resubmit the food instrument with an explanation. Vendor payment processes vary across State agencies, so the discussion of the "Pay Vendor" process is addressed in general terms. Each State agency customizes this function according to its unique requirements; the specific design, timing, and navigation of the individual state WIC IS is dependent upon the processes of each state.

For EBT systems, screening for all of the above requirements is automatic and performed at the point of sale. If any violations are detected, the transaction cannot be completed and the vendor is not paid.

Another important distinction between the paper food instrument system and the EBT system occurs in the maintenance of transaction data and reconciliation of benefits. For paper food instrument systems, reconciliation is needed for the food instruments issued when the food instruments are either redeemed or no longer valid. Reconciliation is performed to account for funds expended and ensure that all food instruments have a valid issuance and certification record.

In an EBT system, the food benefit account is debited each time a transaction occurs, so it is always current. The funds balance for estimated redemption

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<sup>40</sup> This is a core function

values and expenditures for the account is available at any time. Thus, there is no "reconciliation" function. Instead, the family/household food account transaction balance is maintained on an ongoing basis. Additionally, transaction data provides much greater detail, as the specific food items purchased and cost per item are reported.

Finally, in both paper food instrument and EBT systems, it is important to note that the State agency, a bank, or a processor can perform the processing functions. Therefore, to simplify the functional description, the term "processor" is used to cover all the possibilities with the understanding that the processor could be the State agency internal data processing unit, a bank that performs processing functions, or an outside processor.

Readers that are interested in a more comprehensive understanding of WIC EBT/ESD should refer to Appendix C prior to reading the requirements in this section. Reading this appendix first will provide a more in-depth understanding of EBT/ESD and how these systems operate in a WIC environment.

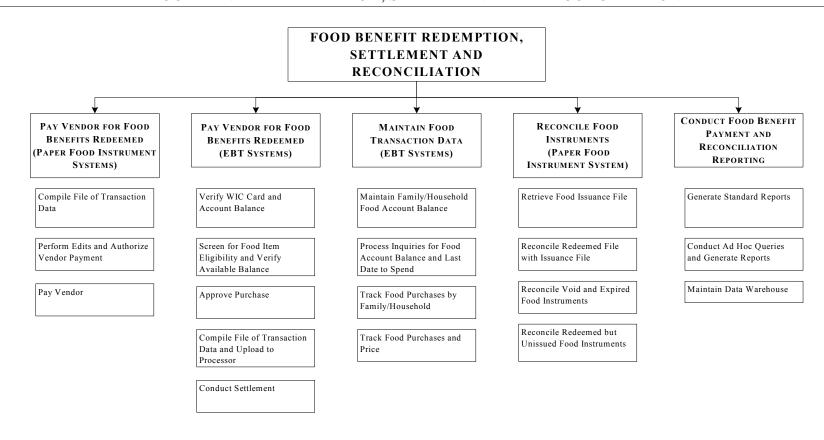
Food Benefit Redemption, Settlement and Reconciliation is comprised of the following functions:

- Pay Vendor for Food Benefits Redeemed (Paper Food Instrument Systems)
  - Compile File of Transaction Data
  - Perform Edits and Authorize Vendor Payment
  - Pav Vendor
- Pay Vendor for Food Benefits Redeemed (EBT Systems)
  - Verify WIC Card
  - Screen for Food Item Eligibility and Verify Available Balance
  - Approve Purchase
  - Compile File of Transaction Data and Upload to Processor
  - Conduct Settlement
- Maintain Food Transaction Data (EBT Systems)
  - Maintain Family/Household Food Account Balance
  - Process Inquiries for Food Account Balance and Last Date to Spend
  - Track Food Purchases by Family/Household
  - Track Food Purchases and Price
- Reconcile Food Instruments (Paper Food Instrument Systems)
  - Retrieve Food Issuance File

FUNCTIONAL REQUIREMENTS DOCUMENT FOR A MODEL WIC INFORMATION SYSTEM, WITH EBT SECTION 3 WIC INFORMATION SYSTEM FUNCTIONS: FOOD BENEFIT REDEMPTION, SETTLEMENT AND RECONCILIATION

- Reconcile Redeemed File with Issuance File
- Reconcile Food Instruments
- Conduct Food Benefit Payment and Reconciliation Reporting
  - Generate Standard Reports
  - Conduct Ad Hoc Queries and Generate Reports
  - Maintain Data Warehouse

# WIC FUNCTIONAL REQUIREMENTS - FUNCTIONAL DECOMPOSITION DIAGRAM FOOD BENEFIT REDEMPTION, SETTLEMENT AND RECONCILIATION



## 3.4.1 PAY VENDOR FOR FOOD BENEFITS REDEEMED (PAPER FOOD INSTRUMENT SYSTEMS)

When the participant completes his/her shopping for WIC foods, he/she presents a food instrument to the cashier in exchange for WIC purchases. The cashier reviews the foods to ensure only approved foods are selected, and reviews the food instrument for compliance with WIC Program requirements. If all is correct, the cashier enters the price on the food instrument and the participant signs the food instrument to complete the sale. WIC food instruments are batched and sent to the processor for payment. In pre-payment edit systems, the food instruments are reviewed prior to payment and in post-payment systems, the food instruments are reviewed after payment.

Following food instrument reviews, funds are transferred to the vendor for properly redeemed food instruments and the vendor is advised of any food instruments that were not paid due to discrepancies. The vendor is given an opportunity to justify payment on the rejected food instruments and to resubmit them for payment.

#### 3.4.1.1 Compile File of Transaction Data

In the paper environment, data resident in the system should be compiled to assist with the vendor payment process. Issuance data is obtained from the IS and includes food instrument serial/identification numbers, issuance dates, maximum values, food instrument active dates (first and last date to spend), as well as void information. Redemption data are obtained from the processor, which may be the State or a third party, such as a data entry contractor or a bank. Redemption data include food instrument serial/identification numbers, redemption dates and amounts, and vendor information.

<u>Level 1.</u> The system should compile issuance data and accept redemption data (through file transfer or direct data entry).

#### Input:

Food Instrument Identification Number Food Instrument Issuance Date Food Instrument Maximum Value Food Instrument Redemption Batch

Food Instrument Redemption Value

Food Instrument Use/Disposition Code

Food Instrument Use/Disposition Date

Food Instrument Valid End Date

Food Instrument Valid Start Date

Food Instrument Vendor Redemption Date

Food Instrument Void Date

Vendor Identification Number

Vendor Outlet Identification Number

#### **Process:**

- Compile issuance data
- Accept input of redemption data from direct data entry or redemption file
- Create a file of the transaction data

#### **Output:**

Food instrument transaction file

# 3.4.1.2 Perform Edits and Authorize Vendor Payment

At the point of sale, the cashier checks the foods purchased and food instruments for compliance with program requirements. The food instruments are submitted for payment.

Functions performed by the processor may vary. The processor captures the vendor identification, the redemption value, and the date of redemption, if the food instrument is a negotiable check. The processor performs a visual check for valid dates, alterations, signatures, etc.

Processors that have access to the WIC IS can input redemption data directly. Processors that do not have direct access must generate a redemption file that can be used to update the WIC IS.

<u>Level 1.</u> Once the data are compiled in electronic form, the processor (which can be the State or a third party) compares the vendor redemption data to WIC Program food instrument issuance data to determine if the food instrument is valid. For those food instruments that pass screening, a payment detail is prepared. For those food instruments that exceed maximum values, are outside valid dates, or have other violations, a rejection report is prepared which

identifies each rejected food instrument, the reason for rejection and amount not paid or billed to vendor for repayment.

# Input:

Food Instrument Identification Number

Food Instrument Issuance Date

Food Instrument Maximum Value

Food Instrument Redemption Batch

Food Instrument Redemption Value

Food Instrument Reject Count

Food Instrument Reject Reason Code

Food Instrument Use/Disposition Code

Food Instrument Use/Disposition Date

Food Instrument Valid End Date

Food Instrument Valid Start Date

Food Instrument Vendor Redemption Date

Food Instrument Void Date

Vendor Identification Number

Vendor Outlet Identification Number

#### **Process:**

- Perform edits by comparing food instrument issuance and redemption data in transaction file
- Input the Vendor Identification Number for the redeeming vendor
- Identify food instruments that fail screening and input the Food Instrument Reject Reason
- Prepare an electronic payment detail report for all food instruments authorized for payment
- Prepare a rejection file for all food instruments that failed screening
- Update Food Instrument data store
- Compile Food Instruments Redeemed File

# **Output:**

Electronic payment detail report for food instruments paid and food instruments rejected

# 3.4.1.3 Pay Vendor

<u>Level 1.</u> The total amount due the vendor is debited to the State agency WIC bank account and credited to the vendor's bank via electronic funds transfer through the ACH network or by State check or warrant. The vendor is also advised of rejected food instruments, reasons for rejection, and informed of what

information he must provide in order to receive payment for the food instrument. It should be noted that when a food instrument is rejected, the State agency might reject payment of the entire food instrument redemption value or just a portion of the value of the food instrument. The system must allow for flexibility in the amount billed or withheld. Also, the system may be designed to automatically assign appropriate values based on the reason for rejection.

# Input:

Food Instrument Amount Billed to Vendor (post-edit)

Food Instrument Amount Collected From Vendor (post-edit)

Food Instrument Amount Not Paid (pre-edit)

Food Instrument Identification Number

Food Instrument Redemption Batch

Food Instrument Redemption Value

Food Instrument Reject Count

Food Instrument Reject Reason Code

Food Instrument Repayment Date

Food Instrument Use/Disposition Code

Food Instrument Use/Disposition Date

Food Instrument Vendor Redemption Date

Vendor Identification Number

Vendor Outlet Identification Number

Electronic Payment Detail Report for Food Instruments Paid and Food Instruments Rejected

#### **Process:**

- Transmit transaction file requesting a debit to the State agency bank and credit to the vendor or vendor's bank for the total approved food instrument redemption amount
- Transmit rejection report notice to the vendor for food instruments where funds were withheld and/or a bill
- Transmit rejection report bill to the vendor for rejected food instruments already paid
- Compile all redemptions by issue month and by vendor and store in the Outlay data store

# **Output:**

ACH transaction (redemption) file

Screen display or report of food instruments rejected

Notice to vendor of food instrument amounts not paid

Bill to vendor for rejected food instruments repayment

FUNCTIONAL REQUIREMENTS DOCUMENT FOR A MODEL WIC INFORMATION SYSTEM, WITH EBT SECTION 3 WIC Information System Functions: Food Benefit Redemption, Settlement and Reconciliation

Screen display or report of value of food instruments redeemed by issue month

Screen display or report of value of redemptions by vendor

# 3.4.2 PAY VENDOR FOR FOOD BENEFITS REDEEMED (EBT SYSTEMS)

The EBT food transaction can be performed in either an off-line or on-line mode with a magnetic stripe card or smart card with a microprocessor chip, or other technology that fulfills program requirements. The primary difference pertains to where the family/household account database resides. If a smart card is used, the household account database is on the card and the Point of Sale (POS) terminal retrieves the data from the card. With a magnetic stripe card, in an on-line mode, the vendor electronically contacts the processor to retrieve and download the family/household account database to the POS terminal.

Not all vendors have scanning systems and electronic processing systems, but the vast majority of large vendors where most WIC purchases occur do have this equipment. Therefore, for simplicity, this function description will use the smart card/off-line mode in a vendor with scanning and electronic processing systems<sup>41</sup>.

The WIC food transaction process involves a substantial amount of electronic communication between the vendor's POS terminal, the card and the vendor's scanning and electronic cash register (ECR) system. In essence, this is where all of the food instrument screening checks done in a paper system would occur for an EBT system. To minimize the technicality of this process, the function description will address these requirements briefly. However, Appendix C contains a more thorough explanation of EBT technical processes and requirements.

The participant uses a shopping list, issued by the local agency or obtained at an inquiry terminal in the grocery store, to purchase WIC foods. When the participant completes shopping, he/she enters the checkout lane with WIC items. The participant places the card in the POS terminal and enters the PIN. The terminal retrieves family/household account information from the card database in an off-line environment (or from the processor database in an on-line

<sup>&</sup>lt;sup>41</sup> It is important to note, however, that any WIC or WIC EBT functionality must also accommodate vendors that do not have scanning and electronic processing systems. This issue is not addressed in this document.

environment). Once the family/household account is verified and available balance identified, the sale begins.

The cashier scans the UPC code on each food item. During each food item scan, the terminal communicates with the family/household account database on the card and the vendor's UPC database system to verify that an eligible food item is selected and that there is an available balance for the food item. The terminal captures data on the food item, UPC, and price. After all items are scanned, the sale is completed and a food transaction data file is captured at the grocery store. In the off-line environment, this file is batched with other WIC transaction files and sent to the processor for payment each day, while in an on-line environment, the transaction may be routed to the processor in real-time.

Once the processor receives the transaction files, it debits the household food benefit account for food items redeemed and records the value of the redemption. The processor then generates and transmits an electronic funds credit to the vendor's bank and a debit to the State agency's bank for the redemption value of all of the transactions. A separate file is also compiled with detailed information on the transaction (e.g., food item purchased and price) for management information purposes.

# 3.4.2.1 Verify WIC Card

<u>Level 1.</u> When the participant inserts the card in the POS terminal, the card and the terminal perform a "handshake" as a type of recognition that they can communicate. The terminal prompts the participant to enter the PIN, and the card is validated against the card database. The card hot list file is checked to be sure this card's PAN is not listed as voided or expired.

# **Input:**

Food Benefit Family/Household Account Card Primary Account Number Food Benefit Family/Household Account End Date Food Benefit Family/Household Account Participant Personal Identification Number

#### **Process:**

Participant inserts card in POS terminal

- The terminal prompts the participant to enter PIN
- The PIN is verified against the PIN offset on the card (in an off-line environment or against the PIN maintained at the host in an on-line environment)
- Check hot card list to verify that the card PAN is valid for transactions

# **Output:**

Acceptance or rejection of card

# 3.4.2.2 Screen for Food Item Eligibility and Verify Available Balance

<u>Level 1.</u> The food item is scanned and the terminal checks the vendor's UPC database to confirm it is an approved WIC item. If it is, it checks the available balance for that food item in the household food account. If there is sufficient balance, the item is deducted from the card's family/household account balance and the vendor's transaction file is updated to reflect the purchase of this food item. This process is repeated for each WIC food item.

# **Input:**

Food Benefit Family/Household Account Balance Aggregate Prescribed Amount

Food Benefit Family/Household Account Balance Aggregate Prescribed Date

Food Benefit Family/Household Account Balance Date

Food Benefit Family/Household Account Balance Remaining Amount

Food Benefit Family/Household Account Balance Used to Date Amount

Food Benefit Family/Household Account Card Primary Account Number Food UPC/PLU Code

#### **Process:**

- After UPC for each food item is scanned, confirm that the item is WIC approved by checking the vendor UPC database
- Confirm that the family/household account has a sufficient balance to purchase this item
- Deduct the food item from the family/household account food balance on the card or at the host
- Update the vendor transaction file to reflect the purchase of this item

# **Output:**

Updated vendor transaction file
Update food benefit account balance information

# 3.4.2.3 Approve Purchase

<u>Level 1.</u> Once all the food items are scanned, the cashier should check to see if there are any "cents-off" coupons to deduct. If so, the coupon is scanned and the value deducted from the total transaction value. Then the sale is completed and a cash register receipt is printed.

<u>Level 2.</u> In an ESD environment, the printed receipt may also contain an appointment reminder message, which could reduce the number of missed appointments.

# **Input:**

Food Benefit Family/Household Account Card Primary Account Number Food UPC/PLU Code

Vendor Transaction Detail Coupon UPC

Vendor Transaction Detail Coupon Value

#### **Process:**

- Total WIC transaction sale
- Scan UPC for any coupons and deduct value from total sale
- Combine any non-WIC sales with WIC sales and print cash register receipt
- In an ESD environment, check card for appointments to add a reminder to the cash register receipt

# **Output:**

Cash register receipt with food balance and, if applicable, appointment reminder notice.

# 3.4.2.4 Compile File of Transaction Data and Upload to Processor

<u>Level 1.</u> Once the sale has concluded, the card (or host account) is updated with the transaction information. The Vendor Transaction File and Vendor Transaction Detail File are compiled. The Vendor Transaction File contains the transaction total amount used to pay the vendor for the foods purchased. The Vendor Transaction Detail File provides food item detail on the food items purchased, including price, which is used for expenditure and cost containment purposes.

The Vendor Transaction File is transmitted to the processor for settlement.

Usually the vendor batches all WIC transactions together and transmits them to

the processor each day. The Vendor Transaction Detail File is also transmitted to the EBT Processor who batches this data for daily transmission to the State agency IS.

# Input:

Food Benefit Family/Household Account Balance Used to Date

Food Benefit Family/Household Account Card Primary Account Number

Vendor Identification Number

Vendor Outlet Identification Number

Vendor Transaction Amount

Vendor Transaction Date

Vendor Transaction Detail Redemption Value

Vendor Transaction Identification Number

Vendor Transaction Reject Reason Code

Vendor Transaction Terminal Identification Number

#### **Process:**

- Update card to close transaction
- Compile Vendor Transaction File and Vendor Transaction Detail File with Transaction Total Amount and Transaction Sales Detail
- Transmit Vendor Transaction and Vendor Transaction Detail Files to the EBT Processor

#### **Output:**

Updated card

Vendor transaction file

Vendor transaction detail file

#### 3.4.2.5 Conduct Settlement

<u>Level 1</u>. The EBT Processor (which may be the State or a third party) generates a vendor credit for the total vendor transaction amounts and transmits the credit to the ACH. The ACH credits the vendor's account and debits the State WIC bank account.

Each day the EBT Processor batches the Vendor Transaction Detail Files with all of the vendor credit amounts and transaction details. This file is used to debit the family/household account for the transactions and build reports on food item purchases and update food obligations and outlays.

#### Input:

These data exist in the EBT Processor's system<sup>42</sup>. However, they may be downloaded by the State for use in its IS.

State Agency Debit Amount Vendor Credit Amount Vendor Transaction File

#### **Process:**

- Retrieve Vendor Transaction File
- Calculate vendor credits/State WIC debits
- Generate ACH Transaction File for transmission to vendor, vendor's bank and State bank
- Generate and transmit Vendor Transaction Detail File to the State agency IS

# **Output:**

ACH transaction file Vendor transaction detail file

<sup>&</sup>lt;sup>42</sup> If the State acts as its own processor, these data elements may already be resident in the IS.

# 3.4.3 MAINTAIN FOOD TRANSACTION DATA (EBT SYSTEMS)

The system must maintain the central family/household food account balance based on the Vendor Transaction Detail Files received (the EBT Processor's account balance and the card balance should agree). The State agency can use the family/household account balances to evaluate its expenditure status each day. In addition, the participant often needs to determine his/her family/household food account balance before shopping. The system needs to accept his/her inquiry from a designated terminal, and print a statement of his/her food balances and the last date he/she can purchase these items.

The EBT transaction data also provides valuable data for program management. The system can track the food items purchased by family/household to evaluate participant food preferences and patterns. The system can also track the food items purchased by brand and cost per item. This enables the State agency to maintain up-to-date food cost data for caseload and financial management. The system must be able to track expenditure and participation data for each participant issued a food prescription.

# 3.4.3.1 Maintain Family/Household Food Account Balance

<u>Level 1</u>. When the processor receives the Vendor Transaction file, it adjusts the Food Benefit Household Account for each transaction conducted with the card. When this occurs, the Food Benefit Family/Household Account food obligation value (estimated redemption value for all of the food items in the account) is decremented and the actual redemption value increased. Therefore, the system can calculate the total food obligation and total food expenditures for a family/household account at any time to assess expenditure status.

The WIC IS adjusts the Food Benefit Family/Household Account Balance of foods based on the Vendor Transaction Detail. The total amount of food items prescribed for the family/household is decremented by the amount of foods purchased. The remaining balance is stored.

In addition, with the UPC price information obtained at the point of sale in the Vendor Transaction Detail file, the State agency can use these current prices to update food item prices in its database. The system should maintain a running average of prices for a particular category such as milk. Each time a purchase is made, the new price for milk would replace an old price. In this way, the State agency could maintain an up-to-date estimate of average food costs as often as it wishes. This, in turn, enables the WIC IS to adjust obligations in all family/household accounts to reflect current food prices.

Another alternative is for the State agency to customize the obligation for each family/household. Under this approach, the system could update the obligation in the family/household food account to reflect prices charged in the most recent food transaction. However, this assumes that the family/household will purchase the same foods at the same vendor in future shopping visits. This approach would probably be best suited to State agencies that use a vendor specific system.

# **Input:**

Food Benefit Family/Household Account Balance Used to Date
Food Benefit Family/Household Account Card Primary Account Number
Food Benefit Family/Household Account Redemption Value
Food Item Category Code
Food Item Subcategory Code
Food UPC/PLU Code
Food UPC/PLU Vendor Specific UPC Average Price

# **Process:**

These processes occur in the EBT Processor's system.

- Retrieve Vendor Transaction and Vendor Transaction Detail Files for redemption transactions
- Debit Food Benefit Household Account and Food Benefit Household Account Balance for the food used and value of food used
- Update the Obligation and Outlay data stores to reflect the food transaction value

#### **Output:**

Updated Food Benefit Household Account and Food Benefit Family/Household Account Balance data stores

# 3.4.3.2 Process Inquiries for Food Account Balance and Last Date to Spend

<u>Level 1.</u> If the participant loses his/her printed food prescription, or needs an updated balance of foods in her family/household food account, he/she can go to

an inquiry terminal at the local agency or vendor and insert his/her card in the inquiry terminal. After entering the PIN, he/she can request an account balance inquiry and the terminal can print a statement listing his/her food item balance based on information in the card database.

#### **Input:**

Food Benefit Family/Household Account Balance Date Food Benefit Family/Household Account Card Primary Account Number Food Benefit Family/Household Account Participant Personal Identification Number

#### **Process:**

- Insert card in inquiry terminal and enter PIN
- Request statement of food remaining in the Food Benefit Family/Household Account Balance
- Print statement with food account balance by food item

# **Output:**

Food benefit family/household account balance of foods and last date to spend statement

# 3.4.3.3 Track Food Purchases by Family/Household

<u>Level 1.</u> The system can use the food item transaction data to determine which foods are consistently selected by participants, and which are less popular. This information can assist the State agency is making changes to authorized foods, such as deleting expensive and unpopular food items. This function is especially important in tracking infant formula purchases. The State agency can bill the formula manufacturer for rebates on the exact quantity by type, form and brand purchased by the participant.

It enables the State agency to assess the amount of non-contract formula issued including costly special formulas for infants with health conditions that require special formula. It can also help identify the food purchases of some particular groups with special needs such as participants with lactose-intolerance.

#### **Input:**

Food Benefit Family/Household Account Balance Used to Date Food Benefit Family/Household Account Card Primary Account Number Food Benefit Family/Household Account Redemption Value Food Item Category Code Food Item Subcategory Code Food UPC/PLU Code

#### **Process:**

- Retrieve Vendor Transaction Detail File
- Sort foods purchased by family/households into Food Category/Subcategory and UPC to identify the number of family/households that selected particular food products
- Extract infant formula purchases by brand and quantity and store in the Rebate data store

# **Output:**

Report of infant formula purchased Report of family/household food purchase frequency by food item and brand

#### 3.4.3.4 Track Food Purchases and Price

<u>Level 1.</u> The system can use the food item transaction data to determine the price by brand of food that participants are selecting. The system should update the prices in the food database so that future food obligations reflect recent price trends. This can help the State agency in forecasting food cost trends, and identifying the brand of food items that are most frequently redeemed by participants. These data could also assist State agencies in pursuing rebates for these foods based on the WIC market share of sales.

# **Input:**

Food Benefit Family/Household Account Redemption Value Food Item Category Code Food Item Subcategory Code Food UPC/PLU Code Food UPC/PLU Vendor Specific UPC Average Price Vendor Identification Number

#### **Process:**

- Retrieve Vendor Transaction Detail File
- Sort foods purchased by UPC and price and average for all vendors to determine the respective prices for different brands of food
- Sort foods purchased by food category/subcategory and price and average for all vendors to determine the respective prices for different types of food (e.g. Milk, Juice)

# Output:

Food purchase price report

# 3.4.4 RECONCILE FOOD INSTRUMENTS (PAPER FOOD INSTRUMENT SYSTEMS)

After food instruments are issued and the valid date for redemption has passed, the system should be used to determine the disposition of all issued food instruments. This is important to accurately adjust estimated redemption values for actual expenditures. It is also necessary to ensure that all food instruments are properly accounted for as redeemed, expired, or voided.

Although participants are encouraged to use all of their food instruments, they sometimes choose not to redeem all or some of the food instruments. Or, if advance printing of food instruments is done, some participants may not claim their food instruments. Similarly, it is possible that the participant redeemed the food instrument, but the vendor did not submit the food instrument for payment in the required timeframe. Also, food instruments are sometimes lost or stolen while in the participant's possession so State and local agency staff have voided the food instrument.

In addition, some food instruments are redeemed but have no issuance record. The system must reconcile these food instruments to a valid certification and issuance record, or investigate for possible fraudulent use.

The system should automatically void food instruments that are expired for participant or vendor redemption.

The system should also capture and maintain data about the manual voiding of food instruments. Food instruments are often voided because the food instruments were damaged or misprinted. The system should capture and maintain this void data for food instruments printed on demand, and food instruments printed in advance in the benefit issuance function.

To help facilitate the voiding of a series of food instruments printed in advance with sequential serial numbers (such as when a participant does not pick up any instruments), the system should provide a capability for users to void the entire series of instruments with a single entry.

#### 3.4.4.1 Retrieve Food Issuance File

<u>Level 1.</u> The system should initiate the reconciliation process by retrieving the file of food instruments issued for an issuance month.

# Input:

Food Instrument Estimated Value

Food Instrument Issuance Date

Food Instrument Maximum Value

Food Instrument Use/Disposition Code

Food Instrument Use/Disposition Date

Food Instrument Valid End Date

Food Instrument Valid Start Date

#### **Process:**

 Retrieve food issuance file for all food instruments that have a Food Instrument Use/Disposition Date within the month of issue that will be reconciled

# **Output:**

Food instrument issuance file by month of issue

#### 3.4.4.2 Reconcile Redeemed File with Issuance File

The system should retrieve the Food Instruments Redeemed File compiled for food instruments paid and food instruments rejected when preparing vendor payments. This provides a list of redeemed food instruments by serial number and redemption value.

Level 1. The system should complete a one-to-one reconciliation match of the food instrument serial numbers in the issuance file with the serial numbers in the redemption file. All food instruments issued and redeemed must be matched with a valid participant record<sup>43</sup>. For all food instruments that are validly redeemed, the system should capture and maintain both the obligation amount (estimated redemption value) and the outlay (actual redemption value) amount.

Food instruments on the rejected list should be held and not reconciled until the vendor has a chance to dispute the non-payment. Once the rejection is settled, the State agency can enter the final food instrument redemption value as an outlay.

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<sup>&</sup>lt;sup>43</sup> This is a core function.

For rejected food instruments that were paid and the vendor billed for the disputed amount, the system should use the actual redemption amount paid.

When the State agency is later repaid by the vendor, this is recorded as a vendor collection.

# **Input:**

Food Instrument Amount Billed to Vendor (post-edit)

Food Instrument Amount Collected From Vendor (post-edit)

Food Instrument Amount Not Paid (pre-edit)

Food Instrument Estimated Value

Food Instrument Identification Number

Food Instrument Issuance Date

Food Instrument Maximum Value

Food Instrument Redemption Batch

Food Instrument Redemption Value

Food Instrument Reject Count

Food Instrument Reject Reason Code

Food Instrument Use/Disposition Date

Food Instrument Valid End Date

Food Instrument Valid Start Date

Food Instrument Vendor Redemption Date

Food Instrument Void Date

Vendor Identification Number

Vendor Outlet Identification

#### **Process:**

- Conduct a food instrument serial/identification number match between food instruments on the issuance file and food instruments on the redemption file
- Replace food instrument obligations with actual redemption amounts for all food instruments paid
- For pre-edit systems, update any food instrument redemption amounts for food instruments that were not paid pending dispute resolution where the State agency and vendor have resolved the final redemption amount
- For post-payment systems, enter any food instrument amounts collected from the vendor
- Update the Obligation and Outlay data stores

#### **Output:**

Updated food instrument obligations and outlays

#### 3.4.4.3 Reconcile Food Instruments

In addition to reconciling used, issued food instruments, the system must be able to reconcile voided, expired, and redeemed but unissued food instruments.

Level 1. The system should automatically void any expired food instruments and delete the obligation value. The system should also retrieve the file on food instruments that were voided by local agencies and ensure the obligation value is deleted. The system should create an exception report for redeemed but unissued food instruments. In some cases, the participant may have used his/her food instruments before his/her certification record was entered in the system. In this instance, the system should run these redeemed food instruments' serial/identification numbers against the food instrument issuance file serial/identification numbers to find a match. If a match is not found, the State agency should investigate the matter with the issuing local agency. The system should include the actual redemption value as an outlay until an investigation is completed.

# Input:

Food Instrument Identification Number Food Instrument Redemption Value Food Instrument Use/Disposition Code Food Instrument Use/Disposition Date Food Instrument Valid End Date Food Instrument Void Date Local Agency Identification Number Participant Identification Number

#### **Process:**

- For any food instruments that are unredeemed and expired (those beyond the maximum allowable days from the first valid date for the participant to use and vendor to request payment), reduce the food instrument obligation to zero, and code these food instruments as "void-expired"
- Retrieve the file on food instruments that were voided, reduce the food instrument obligation to zero and code these food instruments as "void staff void"
- Run a match of the redeemed but unissued food instruments against the issuance file
- For food instruments that still have no matching issuance record, prepare an exception report for the local agency that issued the food instrument with information on the food instrument and its disposition

• Update the Obligation data store for expenditure tracking purposes

# **Output:**

Screen display or report of updated food instrument void reason and date Screen display or report of total food redemption value Redeemed but unissued food instrument exception report by local agency

# 3.4.5 CONDUCT FOOD BENEFIT PAYMENT, SETTLEMENT AND RECONCILIATION REPORTING

Food benefit payment, settlement and reconciliation reports should provide data on payments to vendors, the status and value of food redemptions and array redemption values by vendor and by food or food instrument type. The data are critical for both expenditure management and vendor monitoring. Paper and EBT systems will have similar reports, but the EBT reports will provide much greater detail (i.e., additional information including the brands and quantities of foods purchased, the date and time of the transaction, etc.).

# 3.4.5.1 Generate Standard Reports

Standard reports provide pre-defined data sets in a consistent format and can be requested through a report menu. These recurring reports can be displayed on the screen, printed in hard copy, or saved to a file for later printing or import into another software product. To allow for some limited customization of standard reports, the system may allow users to enter data selection or sort parameters to limit the scope of data included in the report or method of presenting the data. The specific standard reports required in the Benefit Redemption, Settlement, and Reconciliation varies depending upon whether or not the system incorporates EBT. The reports should be available by size, geographic location, size of store, etc. in order to provide the most information for food authorization decisions. The following reports should be available:

# Reports for Paper Systems

- <u>Food Instrument Rejection Reports by Vendor</u> This report provides a listing of specific food instruments that the system has rejected for payment and the reason for each rejection. The report would include all rejections for both pre-payment and/or post-payment screens.
- <u>Infant Formula Purchases</u> This report totals the amount and value of all redeemed infant formula food instruments by type and form.
- <u>Reconciliation report</u> This report lists the disposition of all food instruments issued and final redeemed value or designation as void – unissued, void-expired, or void-unclaimed.
- <u>Redeemed But Not Issued</u> This report lists all food instruments without an issuance record by local agency for use in locating a certification record for investigation.

- Redemption Value by Issue Month This report provides the actual redemption value by month of issuance for all food instruments.
- <u>Summary Food Instrument Redemptions by Vendor</u> This report provides the value of food instrument redemption broken out by vendor.

# Reports for EBT Systems

- <u>Balance Inquiries</u> This report provides data on the number of balance inquiries. It can be broken out by participant, local agency and/or vendor.
- <u>Food Transaction Rejection Reports by Vendor</u> This report provides a listing of specific transactions that the system has rejected and the reason for each rejection.
- <u>Foods Purchased</u> This report lists the foods purchased by brand, type, quantity and price and is useful for overall assessment of food purchasing trends and cost containment analysis.
- <u>Foods Purchased by Family/Household</u> This report shows the number of families/households that selected particular foods.
- <u>Infant Formula Purchases</u> This report lists all infant formula purchased by type, form, and quantity. A subset could array the same data for special formulas or non-contract formula along with the price and reason for issuance.
- Redemption Value by Issue Month This report provides the outstanding estimated redemption values and actual redemption value by month of issuance for all household food benefits.
- <u>Summary Household of Food Redemptions by Vendor</u> This report provides the value of food benefits redemption broken out by vendor.

#### 3.4.5.2 Conduct Ad Hoc Queries and Generate Reports

Sometimes WIC Program staff need specific information that does not exist in any standard report. The analysis required to generate such information may entail the synthesis of data elements that are not typically associated with each other. Such information gathering often is customized to the needs of a particular individual at a specific point in time. Such requests generally are needed only once and usually do not recur over time. The most effective approach to meeting these "on-demand" reporting requirements is through an ad hoc reporting tool. *Thus, the system should enable the user to produce ad hoc queries and to generate reports based on these queries.* 44

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<sup>&</sup>lt;sup>44</sup> Ad hoc reporting is a future core function.

The following are a few examples of the types of ad hoc queries that may be needed within the Benefit Redemption, Settlement, and Reconciliation function:

- Food Price Comparisons By Vendor
- Local Agencies With High Food Instrument Void Rates
- Purchasing Trends Of Particular Brands By Time Period
- Rejection Rates For Specific Vendors By Time Period

#### 3.4.5.3 Maintain Data Warehouse

The most complex level of reporting requires synthesis of data from multiple systems over extended periods of time. The requestor is often attempting sophisticated research to identify trends in data over historical periods. Examples of the use of the data warehouse in the Benefit Redemption, Settlement, and Reconciliation functional area are:

- Impact Of Nutrition Education And Food Purchase Trends On Dietary Assessments
- Impact Of Participant Characteristics And Price On Food Choices
- Patterns Of Food Instrument Rejections In The Vendor Community
- Trends In Food Prices Over Different Time Periods And Across Types Of Vendors

#### 3.5 FINANCIAL MANAGEMENT

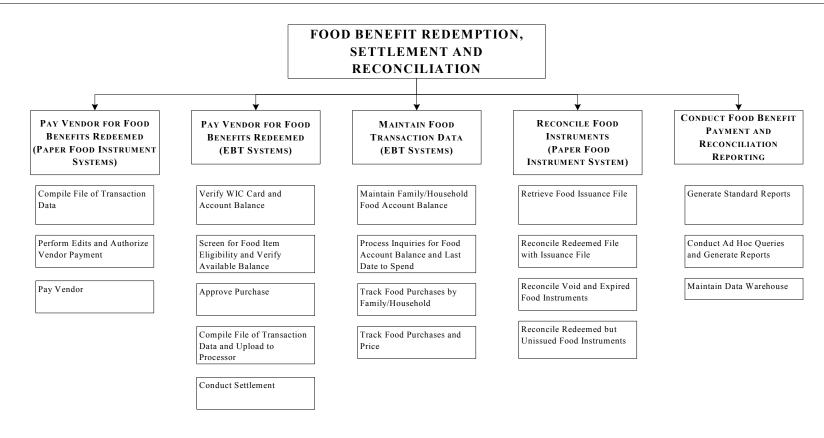
The Financial Management functional area provides the State agency with a tool for managing food and nutrition services and administration (NSA) grants and expenditures. It allows State agencies to manage budget information, track expenditures, calculate rebates due from manufacturers on approved products (i.e., infant formula), monitor actual cash flows and prepare participation and expenditure reports for FNS from data compiled under several other functions. These data also allow WIC managers to perform more sophisticated analyses of projected WIC Program funds usage.

In some State agency systems, financial management is maintained as part of the WIC IS. In other State agencies, it is outside the existing WIC system, but depends upon that system for providing the data necessary to conduct the financial analysis. For example, data captured through the system may be extracted and exported into a PC-based spreadsheet application. The functionality described below for obtaining data required for financial management analysis may occur in the WIC IS or an alternative system.

Financial Management is made up of the following functions:

- Manage Grants and Budgets
  - Track NSA and Food Grants
  - Maintain State Agency Budget Information
  - Maintain and Transmit Local Agency Budget Information
- Monitor Program Expenditures
  - Monitor NSA Expenditures
  - Monitor Food Expenditures
  - Perform Financial Modeling
  - Manage Cash Flow
- Process Manufacturer Rebates
  - Estimate Total Annual Rebates
  - Assess Rebates
  - Assess Rebate Alternatives
  - Monitor Rebate Collections
- Conduct Financial Management Reporting
  - Generate Standard Reports
  - Conduct Ad Hoc Queries and Generate Reports
  - Maintain Data Warehouse

# WIC FUNCTIONAL REQUIREMENTS - FUNCTIONAL DECOMPOSITION DIAGRAM FOOD BENEFIT REDEMPTION, SETTLEMENT AND RECONCILIATION



#### 3.5.1 MANAGE GRANTS AND BUDGETS

State agencies are given a Federal grant for food and NSA expenditures each year. Food grants are used to purchase supplemental foods and may be used to rent or purchase breast pumps. The method used to deliver supplemental foods to WIC participants (i.e., retail purchase, home delivery or direct distribution) determines the cost components of food costs. The cost of supplemental foods delivered by retail purchase, the most common delivery method, equals the amount paid out for food instruments redeemed by WIC participants to authorized vendors for approved foods. State agencies providing supplemental foods through home delivery may charge the food grant for the amount paid to contracted food vendors for both the cost of the prescribed food items delivered to WIC participants and the cost of delivering them. State agencies operating a direct distribution food delivery system may charge the food grant for the amount paid to purchase and maintain a warehouse of food for later distribution to WIC participants. NSA funds are used for client services, breastfeeding, nutrition education and program administration. The amount of the food and NSA grants is determined by FNS through formulas prescribed by regulation. Funds are allocated at the beginning of each fiscal year. Throughout the year, FNS may recover and reallocate funds, so a State agency may receive adjustments to its original grant.

Although the WIC Program does not require matching funds, some State agencies receive funds for food and/or NSA costs from their State budget. These amounts may vary from year to year. State agencies are required to maintain a distinction between funds that are received from the Federal government and any funds received from the State government. It is also important for State agencies to track WIC expenditures and participation according to both the State and the Federal fiscal year budget cycles if they differ. Finally, the State agency may also receive program income from sources outside government such as Welch's grants or vendor Civil Money Penalties (CMPs).

State agencies need information on Federal and State funds allocated to the WIC Program to determine the funds available to support the maximum State caseload and allocate local agency caseload and NSA budgets. It may also be useful for

the system to enable both the State and local agency to retrieve budget data to automatically track actual WIC expenditures against budgeted amounts at a more detailed level.

Federal law and regulation provide the following rules as well as some flexibilities that impact State agency budget and expenditure planning:

- Back Spend Authority (supporting prior year over expenditures with current year funds): A State agency may use one percent of its current year food funds to cover food over expenditures in the prior year. If those over expenditures were related to a loss of infant formula rebate savings, the State agency may back spend three percent of its current food grant. A State agency may also use one percent of its current year NSA funds to cover over expenditures of NSA and/or food funds in the prior year.
- <u>Breastfeeding Support and Promotion Spending Requirement</u>: The State agency must spend a minimum amount on breastfeeding promotion and support, as calculated by FNS.
- Conversion of Grant Funds: State agencies are allowed to use NSA funds for food costs without restrictions, but cannot use food funds for NSA costs except under the conversion provision. If a State agency can actually serve, or projects to serve through its approved conversion plan, more participants than the Federal funding formula projects, it may convert food funds for actual NSA expenses. Each participant over the Federally- projected caseload level earns a conversion of food funds that is equal to the State agency's Federally prescribed NSA grant per participant.
- <u>Food Expenditure Performance Standard</u>: A State agency must spend at least 97 percent of its food grant. If it does not, the difference between its actual food expenditures and 97 percent of the amount allocated for food benefits (not including food funds back spent to the prior year or food funds that are converted to NSA) is deducted from its grant in the next fiscal year (unless a waiver is provided by FNS).
- NSA Expenditure Performance Standard: The State agency's NSA cost per participant cannot be more than 10 percent above its NSA grant per participant. If it is, the amount above 10 percent is multiplied by its average monthly participation times 12 months. This amount is deducted from its grant in the next fiscal year (unless a waiver is provided by FNS).
- <u>Nutrition Education Spending Requirement</u>: At least one-sixth of the State agency's NSA expenditures must be used for nutrition education activities.
- <u>Program Income:</u> A State agency may collect funds from vendor fines, a grant from manufacturers for including their food on the WIC food list

- (such as "Welch's grants") or for other purposes. These funds may be used to cover food or NSA costs.
- Spend Forward Authority (supporting current year expenditures with prior year unspent funds): A State agency may expend prior year unspent NSA funds of up to one percent of its total grant for NSA expenditures in the current year. The State agency may also expend prior year unspent NSA funds of up to 0.5 percent of its total grant for information systems development, including electronic benefit systems, in the current year.
- <u>Vendor/Participant Collections:</u> State agencies often assess claims against participants and vendors for misuse of program funds. Vendor collections also include funds withheld through prepayment edits. The State agency may use these funds for food or NSA expenditures.

#### 3.5.1.1 Track NSA and Food Grants

<u>Level 1.</u> The system should record the food and NSA grants awarded by FNS to the State agency. It also should record the State funds that are allocated for use during the Federal fiscal year. Those State agencies that do not currently receive State funds should not ignore the possibility that they may receive State grants in the future. This information is an important factor in the estimation of caseload and NSA budgets.

Because Federal and State fiscal years often differ, the State agency must adjust the State grant to correspond to Federal fiscal year funding. One method to convert from State fiscal year to Federal fiscal year is to record the State grants for the two State fiscal years that overlap the Federal fiscal year and assign a conversion percentage to each based on the percentage overlap with the Federal fiscal year. For example, given that the Federal fiscal year is October 1 through September 30, if a State fiscal year stretched from January 1 through December 31, the first State grant would be assigned a conversion percentage of 25 percent covering the months of October through December. The second State grant (from the next State fiscal year) would be assigned a conversion percentage of 75 percent, covering the remaining months of January through September.

The NSA and food grant amounts may change over the course of the year, due to reallocations, the funding rules discussed above, and other grant adjustments. The system must update food and NSA grants and budget estimates and use the new information to recalculate and reallocate caseload levels at the State level

and across local agencies. (Additional information on caseload management is provided in the Caseload Management chapter.) The system should maintain a current balance of funding levels in all grant categories throughout the year. The grant balances are then used for the food budget and State and local agency NSA budgets.

#### **Input:**

Grant Adjusted Available Food Funds

Grant Adjusted Available NSA Funds

Grant Backspend Food Funds

Grant Backspend NSA Funds

Grant Beginning Grant Date

Grant Converted Food Funds

Grant Converted NSA Funds

Grant Discretionary NSA Grant

**Grant Ending Food Grant** 

Grant Estimated Annual Rebate

**Grant Estimated Conversion** 

**Grant Estimated Medicaid Reimbursements** 

Grant Estimated Monthly Rebate

**Grant Estimated Other Credits** 

**Grant Estimated Participant Collections** 

Grant Estimated State Food Grant

Grant Estimated State NSA Grant

**Grant Estimated Vendor Collections** 

Grant Federal Fiscal Year

Grant Food Reallocations

Grant Letter of Credit Number

**Grant Medicaid Reimbursements** 

**Grant NSA Reallocations** 

Grant Original Federal Food Grant

**Grant Other Adjustments** 

**Grant Other Credits** 

Grant Other Grant Income

Grant Other Program Income

**Grant Participant Collections** 

**Grant Percent SAG1** 

**Grant Percent SAG2** 

Grant Percent SFG1

Grant Percent SFG2

Grant Program Income

Grant Report Type Code

Grant Report Type Description

Grant SNPIIS Code

Grant Spend Forward Food Funds

Grant Spend Forward NSA Funds

Grant State Agency Identification Number

Grant State Fiscal Year

Grant State Food Grant

Grant State Food Grant FFY

Grant State Food Grant SFY1

Grant State Food Grant SFY2

Grant State Name

Grant State NSA Grant FFY

Grant State NSA Grant SFY1

Grant State NSA Grant SFY2

Grant Total Available Food Funds

Grant Total Available NSA Funds

Grant Total Available Revenues

Grant Unspent Food Funds

Grant Unspent NSA Funds

**Grant Vendor Collections** 

**Grant Vendor Postpayment Collections** 

**Grant Vendor Prepayment Collections** 

#### **Process:**

- Accept user input of Federal and State grant funding information
- Adjust the State grant to correspond to Federal fiscal year funding
- Calculate total available Federal and State funds for Food
- Calculate total available Federal and State funds for NSA
- Update Grant data store

#### **Output:**

Screen display or report of Food and NSA Grants Status

# 3.5.1.2 Maintain State Agency Budget Information

The State agency budget is comprised of both food grant funds and NSA grant funds. For the food budget, the State agency must obtain the total funds available from Federal grants and any State grants as discussed in the previous section and use this information for caseload allocations. In addition, the State agency may use its food funds for the purchase or rental of breast pumps. If it chooses to do so, the State agency may include breast pump costs in the budget.

For the NSA grant, the State agency prepares an NSA budget that combines detailed information on the NSA expenses for the State agency and summary budget information for all local agencies combined. At the end of the Federal fiscal year, the State agency must report to FNS the total expenditures for NSA costs by category for client services, nutrition education, breastfeeding and program administration. Additionally, the State agency may wish to collect more detailed information on line items such as salaries or supplies to better track expenditures as well as to account for IS costs including EBT system costs. While it is not critical that the state agency maintain a budget for these items, it is useful so that the State agency can compare budget amounts to actual expenditures as the year progresses. If a State agency is using spendforward funds for IS expenditures, establishing an IS budget category is highly recommended.

<u>Level 1.</u> The system should provide the ability to retrieve State agency grant and budget data on-line and retrieve local agency budget detail. Since funding for the WIC Program may change during the course of the year, the system must allow users to update grant data and budget estimate data at any time. The system should generate a copy of the NSA budget upon request.

# Input:

**Grant Estimated Breast Pump Costs** 

Grant Federal Fiscal Year

Grant Total Available Food Funds

Grant Total Available NSA Funds

NSA Budget Beginning Grant Date

NSA Budget Beginning Report Date

NSA Budget Breast Pump

NSA Budget Breastfeeding Spending Target

**NSA Budget Client Services** 

NSA Budget Communications and Travel- Breastfeeding

NSA Budget Communications and Travel- Client Services

NSA Budget Communications and Travel- Nutrition Education

NSA Budget Communications and Travel- Program Administration

NSA Budget Communications and Travel- Total

NSA Budget Ending Grant Date

NSA Budget Ending Report Date

NSA Budget Equipment- Breastfeeding

NSA Budget Equipment- Client Services

NSA Budget Equipment- Nutrition Education

NSA Budget Equipment- Program Administration

NSA Budget Equipment- Total

NSA Budget Federal Fiscal Year

NSA Budget Indirect Costs- Breastfeeding

NSA Budget Indirect Costs- Client Services

NSA Budget Indirect Costs- Nutrition Education

NSA Budget Indirect Costs- Program Administration

NSA Budget Indirect Costs- Total

NSA Budget Information Systems- Breastfeeding

NSA Budget Information Systems- Client Services

NSA Budget Information Systems- Nutrition Education

NSA Budget Information Systems- Program Administration

NSA Budget Information Systems- Total

NSA Budget Level Indicator

NSA Budget Local NSA Budget- Total

NSA Budget Nutrition Education Spending Target

NSA Budget Other Direct Costs- Breastfeeding

NSA Budget Other Direct Costs- Client Services

NSA Budget Other Direct Costs- Nutrition Education

NSA Budget Other Direct Costs- Program Administration

NSA Budget Other Direct Costs- Total

NSA Budget Program Administration

NSA Budget Program Income Received

NSA Budget Salaries and Benefits- Breastfeeding

NSA Budget Salaries and Benefits- Client Services

NSA Budget Salaries and Benefits- Nutrition Education

NSA Budget Salaries and Benefits- Program Administration

NSA Budget Salaries and Benefits- Total

NSA Budget Space Utilization- Breastfeeding

NSA Budget Space Utilization- Client Services

NSA Budget Space Utilization- Nutrition Education

NSA Budget Space Utilization- Program Administration

NSA Budget Space Utilization- Total

#### **Process:**

- Calculate adjusted total available Federal and State funds for Food
- Calculate adjusted total available Federal and State funds for NSA
- Calculate total NSA budget for local agencies
- Calculate total NSA budget for the State agency
- Update Grant and NSA Budget data stores

# **Output:**

Screen display or report of State Budget for Food and NSA Screen display or report of Food and NSA Grants Status

#### 3.5.1.3 Maintain and Transmit Local Agency Budget Information

<u>Level 1.</u> Food funds are rarely allocated to local agencies. Instead, a State agency allocates the equivalent of food funds in the form of caseload assignments. The caseload management function is addressed in the Caseload Management chapter.

For NSA funds, the State agency must allocate NSA budgets to local agencies each year. State agencies use various methods to allocate funds such as negotiated budgets or formula allocations. Some State agencies may allocate only a total amount and others may provide a more detailed budget with functional budgets for categories such as nutrition education and/or line items such as salaries. These methods may be supported by the system or handled in the State agency accounting system. Alternatively, the budgeting function may be performed in an external spreadsheet application that uses relevant data exported from the WIC IS.

Regardless of the implementation approach, the system must capture WIC NSA budget data for individual local agencies in order to track expenditures against the budget. Once approved, the system should generate or transmit a copy of the local agency NSA budget to local agencies.

# **Input:**

Local Agency Identification Number

NSA Budget Beginning Grant Date

NSA Budget Beginning Report Date

NSA Budget Breast Pump

NSA Budget Breastfeeding Spending Target

**NSA Budget Client Services** 

NSA Budget Communications and Travel- Breastfeeding

NSA Budget Communications and Travel- Client Services

NSA Budget Communications and Travel- Nutrition Education

NSA Budget Communications and Travel- Program Administration

NSA Budget Communications and Travel- Total

NSA Budget Ending Grant Date

NSA Budget Ending Report Date

NSA Budget Equipment- Breastfeeding

NSA Budget Equipment- Client Services

NSA Budget Equipment- Nutrition Education

NSA Budget Equipment- Program Administration

NSA Budget Equipment- Total

NSA Budget Federal Fiscal Year

NSA Budget Indirect Costs- Breastfeeding

NSA Budget Indirect Costs- Client Services

NSA Budget Indirect Costs- Nutrition Education

NSA Budget Indirect Costs- Program Administration

NSA Budget Indirect Costs- Total

NSA Budget Information Systems- Breastfeeding

NSA Budget Information Systems- Client Services

NSA Budget Information Systems- Nutrition Education

NSA Budget Information Systems- Program Administration

NSA Budget Information Systems- Total

NSA Budget Level Indicator

NSA Budget Local NSA Budget- Total

NSA Budget Nutrition Education Spending Target

NSA Budget Other Direct Costs- Breastfeeding

NSA Budget Other Direct Costs- Client Services

NSA Budget Other Direct Costs- Nutrition Education

NSA Budget Other Direct Costs- Program Administration

NSA Budget Other Direct Costs- Total

NSA Budget Program Administration

NSA Budget Program Income Received

NSA Budget Salaries and Benefits- Breastfeeding

NSA Budget Salaries and Benefits- Client Services

NSA Budget Salaries and Benefits- Nutrition Education

NSA Budget Salaries and Benefits- Program Administration

NSA Budget Salaries and Benefits- Total

NSA Budget Space Utilization- Breastfeeding

NSA Budget Space Utilization- Client Services

NSA Budget Space Utilization- Nutrition Education

NSA Budget Space Utilization- Program Administration

NSA Budget Space Utilization- Total

#### **Process:**

- Record budget information for each local agency and update NSA data store
- Transmit NSA budget allocations to local agencies

# **Output:**

Screen display or report of Local Agency Budgets by Budget Category

#### 3.5.2 MONITOR PROGRAM EXPENDITURES

State agencies should monitor food and NSA expenditures and compare actual costs to budgets as well as submit required reports to FNS. The rate of expenditure of program funds is of particular concern to program managers who must react to this information and adjust caseload allocations accordingly. It is important for State agencies to continuously monitor expenditures and cash flow so that they do not place their financial commitments to participants, vendors, and creditors in jeopardy. Advance warning of surpluses or shortages is critical to minimizing potential disruption of the overall WIC Program operations.

The receipt of infant formula rebates presents a unique challenge in managing expenditures and cash flow. The State agency must pay vendors for the full "prerebate" purchase value for food instruments with infant formula. The State agency recoups the rebate once the infant formula manufacturer is billed and payment is made. Thus, State agencies often need more funds at the beginning of the year to compensate for the lag time in receiving infant formula rebate payments. To cover these additional costs early in the year, FNS issues 1/3rd of the total annual Federal grant in the first quarter, 1/4th in the second and third quarters, and the remaining 1/6th in the final quarter.

A major task under the Financial Management function is to provide FNS with the WIC Financial Management and Participation Report (FNS-798). FNS requires this report from State agencies on a monthly basis and for the fiscal year closeout. For closeout, the State agency must report its spending option elections (spendforward/backspend) and also provide a report on categories of NSA expenditures. The data needed for the FNS-798 involves the food and NSA grants, food budget obligation and food and NSA expenditures. In essence, the data that FNS requires is the same data the State agency needs to manage its funds throughout the year.

The FNS-798 report provides FNS with the data needed to calculate unspent funds for reallocation to State agencies and prepare formula allocations. FNS needs this data to be on time and accurate to assure that all State agencies receive funding as quickly as possible; otherwise, funding for all State agencies is compromised.

## 3.5.2.1 Monitor NSA Expenditures

<u>Level 1.</u> The system should track State and local agency NSA expenditures against the amounts budgeted. If NSA expenditures are kept on a separate State accounting system, the system should interface with the State's accounting system for the transfer of actual NSA expenses.

The system must maintain data for Federal reporting purposes on total NSA expenditures per month and any unliquidated obligations that the State agency expects to spend on capital assets or procurements that have not yet been paid. NSA expenditures and unliquidated obligations will include any breast pumps in the NSA budget and ordered or purchased with NSA funds.

For the closeout report, the State agency must report NSA expenditures by State and local levels for the following categories: Program Management, Nutrition Education, Breastfeeding, and Client Services. More information on NSA reporting requirements can be found in the WIC Reporting Guide, Chapter III, Addendum to WIC Program Financial Management and Participation Report – NSA Expenditures (Form FNS-798A).

# Input<sup>45</sup>:

Clinic Identification Number

Local Agency Identification Number

NSA Budget Program Income Expended

NSA Budget Total Unliquidated NSA Obligations

NSA Expenditure Beginning Grant Date

NSA Expenditure Beginning Report Date

NSA Expenditure Breast Pump

NSA Expenditure Breastfeeding

NSA Expenditure- Client Services

NSA Expenditure Communications and Travel- Breastfeeding

NSA Expenditure Communications and Travel- Client Services

NSA Expenditure Communications and Travel- Nutrition Education

NSA Expenditure Communications and Travel- Program Administration

NSA Expenditure Communications and Travel- Total

NSA Expenditure Date

NSA Expenditure Ending Grant Date

NSA Expenditure Ending Report Date

NSA Expenditure Equipment- Breastfeeding

<sup>&</sup>lt;sup>45</sup> The actual data inputs will vary by State.

NSA Expenditure Equipment- Client Services

NSA Expenditure Equipment- Nutrition Education

NSA Expenditure Equipment- Program Administration

NSA Expenditure Equipment- Total

NSA Expenditure Federal Fiscal Year

NSA Expenditure Indirect Costs- Breastfeeding

NSA Expenditure Indirect Costs- Client Services

NSA Expenditure Indirect Costs- Nutrition Education

NSA Expenditure Indirect Costs- Program Administration

NSA Expenditure Indirect Costs- Total

NSA Expenditure Information System- Breastfeeding

NSA Expenditure Information System- Client Services

NSA Expenditure Information System- Nutrition Education

NSA Expenditure Information System- Program Administration

NSA Expenditure Information System- Total

NSA Expenditure Level Indicator

NSA Expenditure Nutrition Education

NSA Expenditure Other Direct Costs- Breastfeeding

NSA Expenditure Other Direct Costs- Client Services

NSA Expenditure Other Direct Costs- Nutrition Education

NSA Expenditure Other Direct Costs- Program Administration

NSA Expenditure Other Direct Costs- Total

NSA Expenditure Program Administration

NSA Expenditure Program Income

NSA Expenditure Salaries and Benefits- Breastfeeding

NSA Expenditure Salaries and Benefits- Client Services

NSA Expenditure Salaries and Benefits- Nutrition Education

NSA Expenditure Salaries and Benefits- Program Administration

NSA Expenditure Salaries and Benefits- Total

NSA Expenditure Space Utilization- Breastfeeding

NSA Expenditure Space Utilization- Client Services

NSA Expenditure Space Utilization- Nutrition Education

NSA Expenditure Space Utilization- Program Administration

NSA Expenditure Space Utilization- Total

#### **Process:**

- Calculate actual NSA expenditures from State and local agency expenditure reports
- Calculate any Unliquidated NSA Obligations for upcoming months
- Update expenditures to date in the NSA data store
- Compare expenditures as a proportion of the budget amounts for each category

## **Output:**

Screen display or hard copy report showing NSA Expenditures Compared to Budget

Screen display or hard copy report showing NSA Expenditures to date (populating appropriate fields, as listed in the data dictionary)

## 3.5.2.2 Monitor Food Expenditures

<u>Level 1.</u> The State agency must maintain records of its estimated food obligations for current and future months as well as actual outlays for current and past months. These data are collected and compiled from various functions and data stores. When food benefits are issued to a participant, an estimated food redemption value, or obligation, is recorded. The obligation is calculated based on food price data maintained in the system.

An obligation is estimated each time that food benefits are issued and recorded as a food obligation. The total of all food benefit obligations is obtained to project the expenditures for a month. The system also tracks obligations for future months using food obligation estimates prepared under the Financial Modeling function. These data are used for Federal reporting and to help the State agency estimate future costs to stay within the grant.

The participant or caretaker usually has 30 days to purchase food and the vendor has 60 days from the issuance date to request payment. Therefore, for food benefits issued for any given month, actual food expenditures will occur over a period of time. Once all food benefits are paid or otherwise accounted for, the issue month is closed out. At this time, the actual expenditure, or outlay, is known and the original obligation is updated to reflect the actual outlay. These data are accumulated under the Benefit Redemption, Settlement and Reconciliation function.

For paper food instrument systems, the food instrument redemption value is totaled for all food instruments redeemed in the Food Instruments Redeemed File in order to track expenditures. As food instruments issued must be matched against food instruments redeemed, reconciliation must occur before the obligations are updated and outlays are recorded.

The system must also subtract all rebate estimates and amounts billed and collected and vendor collections, participant collections, program income collected, and other credits used to fund food costs from the obligations and outlays. All of the data are used to report to FNS on the FNS-798. Food expenditures and unliquidated food obligations may also include breast pumps ordered or purchased with food funds.

<u>Level 2.</u> For EBT systems, the Food Benefit Household Account data store maintains an ongoing balance of obligations and outlays as it is updated each time a transaction occurs.

## Input:

Future Obligation Date

Future Obligation Federal Participation Estimate

Future Obligation Food By Month

Future Obligation Food Inflation Factor

Future Obligation Food Package Cost Estimate

**Obligation Breast Pump Costs** 

Obligation Date of Current Obligation

**Obligation Net Obligation** 

Obligation Program Income Received

Obligation Total Estimated Obligation

Obligation Total Estimated Other Credits

Obligation Total Estimated Participant Collections

Obligation Total Estimated Rebates

Obligation Total Estimated Vendor Collections

Obligation Total Redemption Value per Month

Obligation Value per Month

**Outlay Breast Pump Costs** 

Outlay Date

Outlay Net Federal Outlay

Outlay Participant Collections Received

Outlay Program Income Received

Outlay Total Other Credits Received

Outlay Total Rebates Billed

Outlay Total Redemption Value per Month

Outlay Vendor Collections Received

#### **Process:**

## Paper Food Instrument System - Obligations

- Retrieve the estimate of future month food obligations from the Future Months Obligations data store
- Retrieve the estimated food instrument redemption values for the month, and past months that are not closed out
- For each upcoming month, add any estimates for breast pump costs that will be purchased with food funds
- Retrieve any vendor collections, participant collections and program income from the Grants data store and subtract the estimated amount the State agency expects to use from the obligation amount
- Retrieve estimated rebates from the Rebate data store
- Subtract the estimated rebates, from the food obligation balance to get the net obligation (Note: The system should revise net obligations each month as actual outlay data are received)

# Paper Food Instrument System - Outlays

- Retrieve the total of all redemptions by issue month
- Subtract any vendor, or participant collections and program income needed to fund food outlays for the month
- Add any food expenditures for breast pump costs to the outlays
- Retrieve the total value of rebates billed from the Rebate data store and subtract the rebates billed from actual outlays to arrive at the net federal outlays for each issue month

# **EBT System - Obligations**

- Retrieve the estimate of future month food obligations from the Future Months Obligations data store
- Retrieve the estimate of gross food obligations for the report month, and past months that are not closed out, from the monthly estimated redemption value of food for each household in the Food Benefit Household Account data store
- Add any estimates for breast pump costs
- Subtract any vendor or participant collections, other credits, and program income and the estimated obligation amount the State agency expects to use from obligations
- Retrieve estimated rebates from the Rebate data store
- Calculate net obligations by subtracting the estimated rebates from the gross food obligation (Note: The system should revise net obligations each month as actual outlay data are received)

## EBT System - Outlays

- Retrieve actual food outlays from the Food Benefit Household Account data store
- Subtract any vendor or participant collections, other credits, and program income needed to fund food outlays for the month
- Add any food fund expenditures for breast pump costs
- Retrieve total value of rebates billed from the Rebate data store
- Calculate net federal outlays by subtracting the rebates billed from actual outlays to arrive at the net federal outlays for each issue month

## **Output:**

Screen display or report of Federal Food Obligations and Outlays Screen display or report of Federal Food Obligations and Outlays Compared to the Budget

## 3.5.2.3 Perform Financial Modeling

Level 1. The State agency must manage its WIC grant to spend as close to 100 percent as possible. If the State agency overspends, there are no federal funds to cover the overage (although some States do have State funds for such situations). The State agency may use back spent funds, but this diminishes funds the State agency will have in the future year. Alternatively, if the State agency under spends by more than three percent, its future grants could be permanently reduced. There are many variables that impact spending such as changes in food costs, changes in rebates, participation fluctuations, inflation, local agency capacity, unexpected increases or decreases in the federal grant and changes in the economic conditions of the WIC target population. Therefore, the system should provide information to the State agency manager that assists in monitoring past, current and future costs. A financial modeling function can achieve this objective.

The system already calculates obligations for the current month of issue and prior months based on food instruments or food benefits issued. However, the system should also support the State agency's preparation of food expenditure obligations for future months that do not yet have issuance data for its budget and for federal reporting purposes. In order to estimate obligations for upcoming months, information is needed on projected participation and projected food costs. Initially, the system should obtain expected participation from the

federally projected participation estimate in the caseload management function. The system can refine this participation estimate as the financial modeling progresses.

To project food costs, the State agency can use actual food cost data for EBT, or historical redemption data from food instruments redeemed for paper food instrument systems. The system can estimate a food package cost by compiling average prices for each food in the food package or food instrument types. The system can estimate the average food package cost for each participant category and for the food instruments in the participant's package. The system should use the pre-rebate food cost for its projections as the estimated rebate is deducted at a later point to arrive at net obligations. It is important that the State agency include in its projections an appropriate inflation factor (if it differs from the Federal inflation factor estimate) as well as any future changes that may impact food costs such as an increase or decrease in rebates or food cost containment plans.

Once the projected participation and food cost data are gathered, the system can then estimate obligations using several options for food costs:

- The number of expected participants multiplied by the average food cost per participant.
- The number of expected participants in each category (e.g., pregnant women, infants, etc.) multiplied by the corresponding category's average food package cost.
- The number of expected redemptions by food or food instrument type multiplied by the average value per food or food instrument type.

This future monthly food obligation is then used for budget planning and federal reporting. If the State agency finds it will exceed its food budget, it can employ more stringent cost containment measures or plan gradual reductions of caseload to stay within its budget. Conversely, if the State agency finds it will underspend, it can take steps to increase caseload. Once the State agency has determined a participation level it can support within the available funds, this becomes the State caseload estimate used in the Caseload Management function to do caseload allocations to local agencies.

When a State agency is in an over or under spending situation, it is also helpful to prepare several "what-if" scenarios. The system should accept different variables for food package costs, participation trends, inflation projections and other variables to estimate future expenditures. In addition, it is important for the State agency to compare its final participation estimate with the FNS funding formula participation projections. If the State agency's participation estimates exceed the FNS estimate due to food cost savings achieved through cost containment initiatives, the State agency may elect to fund additional NSA costs associated with the additional participants through the conversion of food funds to NSA funds. The system should support the analysis required to make this decision and project the impact on food and NSA expenditures. Such financial modeling will assist the State agency in evaluating whether adjustments are needed in caseload allocations or food package cost containment strategies.

#### Input:

For "what if" financial modeling, various parameters can be input to see the impact of the parameter on the projected outcome. These parameters include:

Food Inflation Factor
Food Package Cost Estimate
Participation Estimate
Other Factors as Appropriate (Inputs will vary for each model)

#### **Process:**

- Use projected participation and food cost data to estimate future months obligations
- Calculate an estimate of future expenditures under various scenarios using different food cost and/or participation variables
- Store future obligations by month in the Future Months Obligation data store

#### **Output:**

Screen display or report of Estimated Future Obligations and Expenditures

## 3.5.2.4 Manage Cash Flow

<u>Level 1.</u> The system should enable the State agency to view the effect of actual NSA and food expenditures on the agency's cash position at any given time. This function is intended to provide the State agency with information on cash flows

and balances. The system must record all cash inflows (grants, rebates, recoveries, etc.) as well as cash outflows (food vendor payments, NSA payments for costs, etc.). The State agency must anticipate cash needs to ensure proper cash draws are made against the Federal grant. If the State draws too much cash, it may be liable for interest costs to the Federal government, as required under the Cash Management Improvement Act (CMIA).

The system should provide advance warning of potential problems with significant cash shortfalls or excesses so that the State agency may take appropriate action. Finally, when the fiscal year financial activity is closed out and reconciled, cash drawn from the Federal WIC grants must reconcile to the State agency's reported expenditures.

<u>Level 2</u>: In an EBT system, the State agency may choose to have the processor make direct cash draws from the Federal letter of credit to pay vendors. This eliminates the need to estimate and execute cash draws to supply the State agency bank with funds needed to pay vendors. However, it is complicated by rebate payments that are deposited in the State banking account. The processor must alternate draws between the State bank account and Federal Letter of Credit to manage cash flow efficiently.

# Input:

Cash Flow As Of Date

Cash Flow Current Food Funds Available

Cash Flow Current NSA Funds Available

Cash Flow Current Food Expenditures

Cash Flow Current NSA Expenditures

Cash Flow Previous Food Balance

Cash Flow Previous NSA Balance

#### **Process:**

- Calculate the total cash inflows by adding Federal grants, State grants, manufacturer rebates, program income and vendor/participant collections from the Grants data store
- Calculate total cash outflows by adding vendor payments and NSA expenditures from the Outlays and NSA Expenditure data stores
- Calculate the current cash balances for NSA and food funds by adding total cash inflows to the previous cash balance for each and subtracting the total cash outflows

# **Output:**

Screen display and hard copy Report of Cash Flows

#### 3.5.3 PROCESS MANUFACTURER REBATES

As part of cost containment measures, most State agencies must contract with infant formula manufacturers to obtain rebates in return for the State's exclusive use of the manufacturer's product in the WIC Program. Manufacturers agree to rebate a specific dollar amount per unit of infant formula purchased through the WIC Program. Currently, the largest sum of rebates are collected from infant formula manufacturers, however some State agencies also collect rebates from manufacturers of other food products such as infant cereal, infant juice, and other juice.

Rebates are important because they can significantly reduce the food package cost and allow more participants to be served with Federal grant funds. However, rebates do require a considerable amount of planning and monitoring to ensure integrity in the invoicing and collection process.

For paper food instrument systems, one of the difficulties in assessing infant formula rebates is that State agency systems do not capture the exact type and quantity of infant formula actually purchased by the participant since this information is not collected at the point of sale. Instead, most State agencies prepare rebate invoices based on the number of units of formula issued to the participants on food instruments that have been redeemed. However, participants do not always purchase the entire quantity of units indicated on the food instrument. Therefore, the system needs to adjust the number of units prescribed on food instruments based on the actual redeemed value of the infant formula food instruments when preparing infant formula rebate invoices.

Although infant formula rebates are generally the most prevalent type of rebate, some State agencies are negotiating rebates on other food items. Thus, the system should be flexible enough to handle rebate calculations for items other than infant formula.

## 3.5.3.1 Estimate Total Annual Rebates

<u>Level 1.</u> The system should support this function by allowing State agencies to maintain data on rebate manufacturers and to prepare an estimate of the rebate

amount expected for each month of the coming year. This provides a rebate estimate for Federal reporting and expenditure management. This is especially important if the State agency expects a change in its rebates during the year. The data are also useful for preparing and evaluating rebate proposals.

The expected rebate amount is based on several factors: expected infant participation, number of units per infant, percentage of infants that do not receive formula, historical percentage breakdown of formula sold by product type and form, and rebate rate per product type and form. To accurately assess the rebates, the system must decrease the expected number of infants by the number of those infants that will receive non-contract formula, are solely breastfed, or do not receive any formula on which a rebate is paid.

#### **Input:**

Rebate Estimate Federal Fiscal Year

Rebate Estimate Number of Participants to Receive Type/Form

Rebate Estimate Product Type/Form Rate

Rebate Estimate Product/ Type Form Code

Rebate Estimate Quantity of Product Type/Form per Participant per

Time Period

Rebate Estimate Rate for Contract 1

Rebate Estimate Rate for Contract 2

Rebate Manufacturer Address- City

Rebate Manufacturer Address- State

Rebate Manufacturer Address- Street

Rebate Manufacturer Address- Zip Code

Rebate Manufacturer Contact Name

Rebate Manufacturer Contact Telephone Number

Rebate Manufacturer Contract End Date

Rebate Manufacturer Contract Number

Rebate Manufacturer Contract Start Date

Rebate Manufacturer Email Address

Rebate Manufacturer Identification Number

Rebate Manufacturer Name

Rebate Manufacturer Percent Market Share

#### **Process:**

- Capture information about Rebate manufacturer
- Calculate the number of infants estimated to receive each type and form of formula (estimated infant participation less the number of infants receiving non-contract and exempt formula and fully breastfed)

- Calculate the total number of units to be purchased by multiplying the estimated number of infants times an estimated number of units per infant by type and form of infant formula
- Calculate the estimated total rebate by multiplying the rebate for each type and form of infant formula by the estimated number of units for each formula by type and form
- Calculate the total estimated rebate amount from the sum of the rebates for all of the individual formula types and form and store in the Rebate data store

#### **Output:**

Screen display or report on Projected Total Rebate for Each Formula Type and Form

#### 3.5.3.2 Assess Rebates

Level 1: In a paper food instrument system, the system should identify all redeemed food instruments with infant formula, and the number of units issued for each infant formula product type and form, by month of issuance. The system should estimate the actual number of units of redeemed infant formula, taking into account the number of full versus partial infant formula packages, to ensure that the invoice for rebates is as close as possible to the actual number of units purchased<sup>46</sup>.

One method that the system might use to calculate an estimate of the number of units purchased is to divide the total value of all infant formula food instruments redeemed by the average price of a unit of formula (as calculated from prices obtained from vendor price data on infant formula). If the estimated number of units purchased from this calculation is less than the quantity of units issued on the redeemed food instruments, the system should use the estimated number of units purchased to compute the rebate amount. To perform this computation, it is necessary to isolate infant formula from all other types of food on the infant food instruments so that the redemption value is not distorted by the purchase of other food items such as juice and cereal.

Another method to estimate the actual number of units purchased is for the system to prepare an exception report which lists all food instruments with infant formula that have a redemption value which is significantly less than what that

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<sup>&</sup>lt;sup>46</sup> This is a core function.

food instrument type normally costs. After identifying food instruments with low redemption values, the system should divide these food instruments redemption values in a manner similar to the method above to determine an estimate of the number of units of infant formula that were purchased.

Once the number of units is determined, this number is multiplied by the rebate for each type and form of infant formula. In addition, it is important to report rebate payments by the month of issue of the food benefit rather than the month of redemption. Contract effective and termination dates must be linked to the issue date. Price increase clauses in contracts are also based on the issue date, therefore, it is possible to have two rebate levels in effect for a given redemption month.

<u>Level 2:</u> The system should generate an itemized invoice that provides supporting detail on the rebate calculations. Once reviewed by the State agency, the invoice is sent to the manufacturer for payment. The State agency should have a method to track the invoice.

<u>Level 3:</u> In an EBT system, the transaction data provides the number of units by brand, type and form of infant formula purchased. The number of units purchased is multiplied by the rebate for that infant formula type and form to determine the rebate amount to be invoiced.

If other food items receive rebates, the system should use a process similar to the one used for infant formula to calculate these rebates.

#### **Input:**

Rebate Actual Average Redemption Price

Rebate Actual End Date

Rebate Actual Product Type/Form Code

Rebate Actual Product Type/Form Rate

Rebate Actual Redeemed Quantity

Rebate Actual Sale Identification Number

Rebate Actual Start Date

Rebate Invoice Bill Amount

Rebate Invoice Identification Number\*

Rebate Invoice Total Items Purchased Quantity

Rebate Manufacturer Identification Number

#### **Process:**

 For EBT systems, retrieve the food item transaction data for infant formula from the Rebate data store and multiply the number of units purchased by the rebate rate for each type/form

## Paper Food Instrument System

- Retrieve data on redeemed food instruments with infant formula and calculate number of units of each infant formula type and form that were redeemed
- Verify the reasonableness of the number of cans reported redeemed (based on issuance records) by comparing it to the estimated number of cans purchased (the total redemption value of all the redeemed food instruments for the food product divided by the average food prices) or other negotiated methodology
- Calculate the rebate for each product form and type by multiplying the rebate rate by the number of units of each type form purchased
- Prepare rebate bill for the manufacturer

#### **Output:**

Screen display and hard copy report on Rebate Amount for Each Product Type and Form

Rebate Bill for Infant Formula Manufacturer

## 3.5.3.3 Assess Rebate Alternatives

While most State agencies must contract with infant formula manufacturers for rebates, there are some exceptions. A common exception is for very small ITO State agencies that are not required to have a sole-source contract. These State agencies may instead have an open market contract that permits all manufacturers to pay a rebate (usually a much smaller rebate than in sole-source contracts). It is possible that a State agency could use the open market system for other WIC foods.

<u>Level 1.</u> In an open market contract, the system calculates the rebate amount due based on the total number of each type of infant formula purchased (as indicated by the total number of cans prescribed on redeemed food instruments) multiplied by the participating manufacturer's annual share of the infant formula market, multiplied by the rebate amount per can.

# **Input:**

Rebate Actual End Date
Rebate Actual Product Type/ Form Code

Rebate Actual Product Type/ Form Rate

Rebate Actual Redeemed Quantity

Rebate Actual Sale Identification Number

Rebate Actual Start Date

Rebate Invoice Bill Amount

Rebate Invoice Identification Number\*

Rebate Invoice Total Items Purchased Quantity

Rebate Manufacturer Identification Number

Rebate Manufacturer Percent Market Share

#### **Process:**

- Retrieve data on redeemed food instruments with infant formula and calculate number of cans of each infant formula by type and form that were purchased for a given issue month
- For paper food instruments, verify the reasonableness of the number of cans reported redeemed (based on issuance records) by comparing it to the estimated number of units purchased (the total redemption value of all the redeemed food instruments for the food product divided by the average food prices)
- Calculate the rebate for each product type and form by multiplying the rebate rate by the number of units of each type and form purchased times each manufacturer's rebate market share
- Prepare infant formula rebate bill

## **Output:**

Screen display and hard copy report on Rebate Amount For Each Product Form and Type

#### 3.5.3.4 Monitor Rebate Collections

<u>Level 1.</u> The system should track the invoicing and collection of manufacturer rebates. The system should record the actual invoice dates and amounts when they are generated by the system. The system must accommodate increases or decreases to the original rebate invoice amount that might arise due to subsequent adjustments.

## **Input:**

Rebate Invoice Adjustment Reason Code

Rebate Invoice Amount Adjusted

Rebate Invoice Amount Collected

Rebate Invoice Bill Amount

Rebate Invoice Identification Number\*

## **Process:**

- As rebate payments are received, enter the amount collected
- Enter any adjustments made and the reason code and update Rebate data store

# **Output:**

Screen display and report of Rebate Status

#### 3.5.4 CONDUCT FINANCIAL MANAGEMENT REPORTING

State agencies are required to submit the WIC Financial Management and Participation Report (FNS-798) to FNS. This report provides information monthly on projected and actual participation, projected and actual food and NSA obligations and outlays, rebates, program income, post-payment vendor and participant collections, and amounts and sources of funds available to cover projected and actual expenditures<sup>47</sup>.

The final monthly report is the State agency's annual closeout report and reflects final data for the fiscal year. The State agency reports its current year spending options as well as provides data on the use of funds from the prior or subsequent fiscal years. The State agency submits the report to its FNS regional office, which is responsible for reviewing it and resolving any discrepancies or problem areas. Most State agencies submit these reports via the SNPIIS On-Line Data Entry System to the central FNS data system. It should be noted that WIC Federal reporting is very complicated and any system design should include a careful review of the FNS WIC Reporting System Guide that provides a thorough explanation of reporting requirements.

In addition, there are other reports that the system generates to assist in funds management for the program.

## 3.5.4.1 Generate Standard Reports

Standard reports provide pre-defined data sets in a consistent format and can be requested through a report menu. These recurring reports can be displayed on the screen, printed in hard copy, or saved to a file for later printing or import into another software product. To allow for some limited customization of standard reports, the system may allow users to enter data selection or sort parameters to limit the scope of data included in the report or method of presenting the data. Standard financial management reports include the following:

• <u>WIC Financial Management and Participation Report (FNS 798)</u> – This report reflects monthly food and NSA funds and costs, as well as the status of food and NSA grants as State agencies exercise spending

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<sup>&</sup>lt;sup>47</sup> This is a core function.

- options. The closeout FNS-798 records the final status of the State agency's WIC grant and costs for the report year<sup>48</sup>.
- Addendum to WIC Financial Management and Participation Report (FNS-798A) The FNS-798A report provides a breakout of total fiscal year NSA expenditures by category—Nutrition Education, Breastfeeding, Client Services and Program Administration.
- WIC Local Agency Directory Report (FNS-648) This report provides the name and address of each local agency funded by the State agency or Indian Tribal Organization.

In addition, State agencies may want to produce the following reports for management purposes.

- <u>Breast Pump Budget and Expenditures</u> This report would provide data on each local agency's breast pump expenditures and compare expenditures to their budget.
- <u>Cash Flow</u> This report would show cash inflows and outflows on a daily basis.
- <u>Local Agency NSA Expenditures</u> This report would provide data on each local agency's expenditures and compare expenditures to their budget.
- NSA Budget by Local Agency This report would provide the local level NSA budgets by function and line item.
- <u>Rebate Status</u> This report would provide data on rebate estimates, rebates billed and rebates collected. Rebate billing invoices should include: month/date that the food instrument was issued to the participant, date the food instrument was transacted by the participant, redeemed dollar amount, number of cans listed on the food instrument, WIC food instrument number, and the infant formula type/form.
- <u>State Agency NSA Budget</u> This report would provide the State level NSA budget by function and line item.
- <u>Summary of Food Expenditures</u> This report would provide data on total obligations and outlays for the year to date.
- <u>Summary of Funds Receipts</u> This report would provide data on the receipt and use of program income, vendor and participant collections and any other funds that increase the grant or reduce expenditures.
- <u>Summary of Grants</u> This report would provide data on the Federal (and State if applicable) grants received for the year to date as well as spendforward or spendback funds applied to the grant.

<sup>&</sup>lt;sup>48</sup> This is a core function.

## 3.5.4.2 Conduct Ad Hoc Queries and Generate Reports

The WIC IS should enable users to generate ad hoc reports. <sup>49</sup> While standard reports provide critical data for basic funds management and FNS reporting, the State agency may also need ready access to financial data to perform projections. State agencies are often offered reallocation funds and must determine whether they believe they can fully use the extra funds or decline all or some of the offered funds. To make such decisions, ad hoc reports may use participation data, selected food expenditure/food cost data, and other data that will assist the State agency in realistically estimating its funding needs.

Examples of possible ad hoc reports include:

- Comparison of daily cash flows with expenditures
- Comparison of local agency expenditures for budget line items such as salaries
- Per participant cost for budget line items or functions (e.g. nutrition education)
- Financial modeling reports with "what-if" assumptions

#### 3.5.4.3 Maintain Data Warehouse

Financial data are critical to the effectiveness of a WIC data warehouse. Data on both budgeted and actual expenses can be combined with participant demographic, nutritional education, health surveillance, and dietary assessment data to perform cost benefit analyses and performance outcome measurement. Financial data may also be used in conjunction with no-show, participation, and other participant service data to perform "what if" analysis for enhanced caseload management. Budget, expenditure, rebate, and food item price data from the Financial Management functional area should be included in the data warehouse to improve program management. Examples of possible data warehouse inquiries include:

- Cost effectiveness of increasing staff time on spent on nutrition education to improve health outcome
- Cost effectiveness of specific food items for encouraging proper weight gain over time

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<sup>&</sup>lt;sup>49</sup> Ad hoc reporting is a future core function.

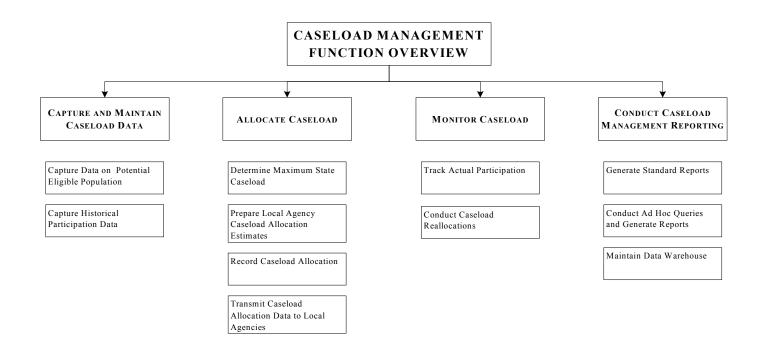
## 3.6 CASELOAD MANAGEMENT

The Caseload Management functional area is intended to support the tracking and analysis of participation in the WIC Program. It collects and stores information on caseload allocation to local agencies, monitors participation against assigned caseloads, and conducts caseload reallocations. Caseload management functions can be part of the WIC IS, another State financial system, or a spreadsheet application.

Caseload Management is made up of the following functions:

- Capture and Maintain Caseload Data
  - Capture Data on Potential Eligible Population
  - Capture Historical Participation Data
- Allocate Caseload
  - Determine Maximum State Caseload
  - Prepare Local Agency Caseload Allocation Estimates
  - Record Caseload Allocation
  - Transmit Caseload Allocation Data to Local Agencies
- Monitor Caseload
  - Track Actual Participation
  - Conduct Caseload Reallocations
- Conduct Caseload Management Reporting
  - Generate Standard Reports
  - Conduct Ad Hoc Queries and Generate Reports
  - Maintain Data Warehouse

# WIC FUNCTIONAL REQUIREMENTS - FUNCTIONAL DECOMPOSITION DIAGRAM CASELOAD MANAGEMENT FUNCTION OVERVIEW



#### 3.6.1 CAPTURE AND MAINTAIN CASELOAD DATA

In order to perform caseload allocations, the State agency needs State and local agency data on the potential eligible population, and actual historical data on participation trends.

In some State agency systems, caseload allocation is maintained as part of the WIC IS. In other State agencies, it is outside the existing WIC IS, but depends upon that system for providing the data necessary to conduct the caseload analysis. For example, data captured through the system may be extracted and exported into a PC-based spreadsheet application. The functionality described below for obtaining data required for caseload allocation analysis may occur in the WIC IS or an alternative system.

## 3.6.1.1 Capture Data on Potential Eligible Population

<u>Level 1.</u> The system should capture data on the potentially eligible WIC population. Annually FNS provides State agencies with their estimated grant level, including estimates of the potential income eligible infant and children population in each State. The State agency can use this data, along with any data available from State data sources (persons served by Medicaid, Food Stamp Program, TANF, etc.), to estimate for the State, and each local agency, the number of persons that might apply for WIC services. The State agency needs to consider the impact of the Commodity Supplemental Food Program (CSFP) on potential eligibles in places where WIC and CSFP both operate.

The FNS grant also estimates the supportable participation for the fiscal year based on the State agency's actual food package costs adjusted for inflation from the prior year. This participation estimate provides a benchmark for the State agency to use in its caseload estimates. In addition, if the State agency estimates that it can serve more participants than the USDA/FNS participation estimate, the State agency may convert food grant funds over for NSA expenditures to cover the additional cost of serving more participants.

## **Input:**

Caseload-Local Agency Potential Eligible Participation Caseload-State Agency Federal Participation Estimate Caseload-State Agency FNS Potential Eligible Participants Caseload-State Agency State Potential Eligible Participants

#### **Process:**

- Add, update, or delete potential eligibles data
- Update the Caseload State Agency and Caseload Local Agency data stores

## **Output:**

Screen display or report of potential eligible data

# 3.6.1.2 Capture Historical Participation Data

<u>Level 1.</u> To prepare for allocations to local agencies, the State agency must consider historical participation data that may influence caseload allocations. These would include each local agency's prior year caseload allocations, actual participation levels by participant category (pregnant, breastfeeding, postpartum, infant and child), priority levels served, applicants on waiting lists, racial/ethnic category, and migrant participants.

## **Input:**

Participant Category Code
Participant Priority Level Code
Participant Residential Status Code
Participant Status Code
Participation Actual
Participation Month
Participation Projected

#### **Process:**

- Retrieve participation data for each Local Agency from the Caseload-Local Agency and Participation data stores
  - Prior Year Caseload level
  - Participation by Participant Category
  - Waiting List Applicants
  - Participation by Priority Level
  - Local Agency Migrant Participation
- Update the Caseload- Local Agency data store

## **Output:**

Screen or report of local agency participation profile

#### 3.6.2 ALLOCATE CASELOAD

Under the Financial Modeling function, the State agency determines the total number of caseload slots it can allocate to local agencies based on expenditure and cost projection data. The State agency must now assign the caseload levels based on greatest population need and the extent to which the local agency has reached the potential eligible population in its service area. The State agency may also wish to consider the ability of the local agency to serve a particular caseload level given its expected staff and facility capacity. Additionally, the State agency must ensure that enough caseload is allocated to expend as close to 100 percent of grant funds as possible without overspending.

As Federal grant reallocations may occur throughout the year, the State agency may need to reallocate caseload if it appears that significant under spending may occur. Conversely, State agencies must reduce caseload or modify food packages if overspending is possible, as the Federal grant will not cover over expenditures.

## 3.6.2.1 Determine Maximum State Caseload

Level 1. The system should calculate the maximum number of participants the State agency can serve on a monthly basis. However, local agencies often do not serve the full caseload allocation, so the State agency may wish to use a caseload achievement rate adjustment to inflate caseload slots allocated. For instance, if local agencies have reached a historical average of 95 percent of their caseload allocation, the State agency may wish to inflate the caseload allocation by a 5 percent caseload achievement rate adjustment to ensure that local agencies reach 100 percent of the caseload allocation.

If the State expects fluctuations in month-to-month participation such as to serve migrant participants, or anticipates it will need to increase or decrease from its current participation level to fully use its grant, the system should factor this into the monthly allocations. The system should then store the monthly State agency caseload for each month in the Federal fiscal year.

Finally, it is important for the State agency to compare its caseload estimate with the funding formula participation projections supplied by FNS. If the State agency's estimates exceed the FNS estimate due to food cost savings achieved through cost containment initiatives, the State agency may elect to fund any additional NSA costs associated with this participation increase through the conversion of food funds to NSA funds.

## **Input:**

Caseload - State Agency Caseload Achievement Rate

Caseload- State Agency Caseload Growth or Reduction Rate

Caseload- State Agency Month

Caseload- State Agency Total Monthly Caseload

#### **Process:**

- Adjust monthly State Agency caseload with any caseload achievement rate factor
- Adjust monthly caseload to allow for participation levels fluctuations and/or targeted growth or reduction rates
- Store maximum State agency caseload level by month in Caseload-State Agency data store

#### **Output:**

Screen showing monthly state caseload target

## 3.6.2.2 Prepare Local Agency Caseload Allocation Estimates

<u>Level 1.</u> After the maximum monthly caseload is determined, the State agency should divide the caseload among the local agencies so that they know how many participants they can support each month. Local agency caseload allocation is determined by the State agency on the basis of current participation levels, categorical participation, no-show and redemption rates, caseload target rates, expected migrant participation, CSFP operations in the WIC service area, and waiting lists for each local agency.

It should be noted that some State agencies choose to perform centralized caseload management without identifying specific allocations to the local agencies. In such instances, the local agencies are allowed to accept as many participants as they can support. Participants may be accepted at all seven priority levels. The State agency monitors the total caseload and issues Statewide directives to either increase outreach or stop accepting new cases

according to the availability of funds. To operate the WIC Program in this manner, it is important for the State agency to have accurate and timely caseload information and to know, with relative precision, the lead times needed to achieve an increase or decrease in total caseload. It is possible to automate the process by which the State agency determines the caseload allocations for each local agency by devising an allocation formula that accounts for all the factors in this process. Each State agency usually has a unique method of determining caseload allocations. Consideration is usually given to factors such as current local agency caseload, percentage of assigned caseload reached, number of eligible participants in the local agency service area, coverage of potential eligibles, local agency participant growth rate, participant-to-staff ratios, current waiting list by category and priority, severity of health risk among the local agency's target population, and local agency staffing levels and clinic facilities.

The system should automatically distribute local agency caseload based on the formula that establishes the relationship between a set of factors determined by the State agency. If the system automatically calculates and records the allocation of local agency caseload, it is important that it also be possible to manually override or update the allocation data to accommodate changes that were not accounted for in the formula built into the system.

Reallocations can occur at any time during the year, so the system must permit update of the allocations upon request. The system should also have the flexibility to make adjustments that are required because of differences between the State and Federal fiscal years. The total sum of all local agency caseload allocations should not exceed the maximum caseload allocation for the State.

#### **Input:**

Caseload-Local Agency Caseload Achievement Rate
Caseload-Local Agency Caseload Growth or Reduction Rate
Caseload-Local Agency Monthly Caseload Assignment
Caseload-Local Agency Prior Year Caseload Level
Caseload-Local Agency Total Actual Local Agency Monthly
Participation
Caseload-State Agency Total Monthly Caseload

Caseload Allocation Parameters to use "what if" capability

#### **Process:**

- Retrieve data from the Caseload-State Agency and Caseload-Local Agency data stores
- Apportion caseload among local agencies according to the State caseload allocation method
- Provide "what if" analysis capability to demonstrate the impact on caseload allocation by changing the caseload allocation parameters

## **Output:**

Screen display or report showing proposed caseload allocation by local agency

#### 3.6.2.3 Record Caseload Allocation

The division of the allocation process into two steps, analysis and approval, provides State agencies with the flexibility to determine whether it is appropriate to actually modify caseload assignments on the basis of changes suggested by the system model. State agencies should make this decision before such changes are officially stored in the central processor site or announced to local agencies.

<u>Level 1.</u> Once approved by the State agency, the system should store the caseload allocation data, either as recommended by the system, or as manually entered by the State agency. This information will be used for notifying the local agencies of their individual allocations and tracking assigned caseload against actual participation.

#### **Inputs:**

Caseload-Local Agency Month Caseload-Local Agency Monthly Caseload Assignment Clinic Identification Number Local Agency Identification Number

#### **Process:**

- Collect and store local agency caseload allocation in Caseload-Local Agency data store
- Compare sum of local agency caseload allocations to maximum state allocation
- Update Caseload–Local Agency data store with monthly caseload assignment

#### **Output:**

Screen or report of caseload by local agency

# 3.6.2.4 Transmit Caseload Allocation Data to Local Agencies

<u>Level 1.</u> Once the State agency has assigned caseloads to each local agency, the system should transmit the data. Optimally, the system would transmit caseload levels electronically, but it could also be conducted via the mail along with any particular directives concerning caseload management.

# **Inputs:**

Caseload-Local Agency Monthly Caseload Assignment Local Agency Identification Number

#### **Process:**

- Retrieve Caseload Assignment from Caseload Local Agency data store
- Generate Caseload Allocation Transmission File, Caseload Allocation Report, or Email with Caseload Allocation

## **Output:**

Caseload allocation transmission file Caseload allocation report Caseload allocation notice or e-mail

#### 3.6.3 MONITOR CASELOAD

Once the caseload is allocated, it is important to track actual participation levels against the assigned caseload levels so that the State or local agency can make adjustments in response to various changes or trends observed over the course of the year. The need for caseload adjustments may be due to local agency performance or to external trends that influence State expenditure patterns.

# 3.6.3.1 Track Actual Participation

<u>Level 1.</u> The system should support this function by retrieving assigned caseload data and comparing it to actual participation data on a month-by-month basis. The system should notify the State agency if local agencies fail to meet or exceed their assigned monthly caseload by significant percentages. If a local agency has reached its maximum caseload level, the system should automatically warn the agency against accepting additional applications. Alternatively, if a local agency is significantly below caseload, the State agency can consider shifting its caseload to a local agency that is above caseload.

The system should also provide information on key trends that may impact a State agency's decision to perform caseload reallocations among local agencies. Such data might include an increase or decrease in no-show and non-redemption rates, exceeding target participation for particular participant categories, trends in breastfeeding rates, or trends in certification expirations.

This function should address current enrollment (people authorized to received benefits) and food benefit pick up (people that received benefits) for the specified time period.

## **Input:**

Caseload- Local Agency Caseload Achievement Rate
Caseload- Local Agency Caseload Growth or Reduction Rate
Caseload- Local Agency Total Actual Local Agency Monthly
Participation
Food Instrument Identification Number
Food Instrument Pick Up Date
Participant Certification End Date

#### **Process:**

The following analyses may be made for each local agency.

- Calculate caseload achievement rate and current rate of change (from previous months) in caseload achievement rate
- Store in Caseload-Local Agency data store
- Update Participation data store

## **Output:**

Screen display or report on local agency caseload utilization

#### 3.6.3.2 Conduct Caseload Reallocations

Level 1. State agencies need to carefully monitor both local agency and expenditure trends throughout the year to ensure they do not over or under expend funds. If some local agencies are under or over performing, a reallocation of caseload is warranted. Similarly, the State agency may need to adjust caseload due to funding and expenditure trends. Expenditures could be impacted by funding increases or decreases, infant formula rebate changes, radical changes in food prices, a decision to convert food funds to NSA funds, or shifts in the number of applicants in the various priority categories. Note: Some State agencies recommend that budgeting and caseload reallocation be done by a financial management system instead of the WIC IS because of the many external variables that exist affecting caseload management decisions.

#### **Input:**

Caseload-Local Agency Month
Caseload-Local Agency Monthly Caseload Assignment
Clinic Identification Number
Local Agency Identification Number
Participation Actual
Participation Month

#### **Process:**

- Monitor participation, food costs and expenditure patterns for significant changes from the original data used to allocate caseload
- If substantial changes have occurred, input the necessary updated data and recalculate caseload allocations
- Collect and store local agency caseload allocation in Caseload-Local agency data store

- Compare sum of local agency caseload allocations to maximum state allocation
- Update Caseload–Local Agency data store with monthly caseload assignment

# **Output:**

Screen display or report with updated caseload allocations

#### 3.6.4 CONDUCT CASELOAD MANAGEMENT REPORTING

The system should produce reports for FNS reporting requirements and for its own internal use in managing caseload.

#### 3.6.4.1 Generate Standard Reports

Standard reports provide pre-defined data sets in a consistent format and can be requested through a report menu. These recurring reports can be displayed on the screen, printed in hard copy, or saved to a file for later printing or import into another software product. To allow for some limited customization of standard reports, the system may allow users to enter data selection or sort parameters to limit the scope of data included in the report or method of presenting the data. Standard caseload management reports include the following:

- <u>Caseload by Local Agency</u> This report would show caseload by local agency.
- <u>Local Agency Caseload Utilization</u> This report would show caseload, participation, and percent of caseload reached. This report could include a graphical component.
- <u>Local Agency Participation Profile</u> This report would show each local agency's participation characteristics.
- <u>Monthly State Caseload Target</u> This report would show the caseload target and the assumptions used to arrive at the caseload level.
- <u>Potential Eligibles Data</u> This report would display the potential eligibles for the State agency and by local agency.

#### 3.6.4.2 Conduct Ad Hoc Queries and Generate Reports

The WIC IS should enable the staff to produce ad hoc reports.<sup>50</sup> In order to revise caseload allocations appropriately, the State agency may wish to conduct ad hoc reports that focus on particular local agency participation patterns. Examples would include:

- Caseload growth rate in relation to potential eligibles reached
- Participation by category/priority and respective growth rate
- Participation patterns at particular months

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<sup>&</sup>lt;sup>50</sup> Ad hoc reporting is a future core function.

## 3.6.4.3 Maintain Data Warehouse

The data warehouse may be used in the Caseload Management functional area to look at such topics as historic trends in participation, food costs, and local agency caseload achievement rate. Monthly Federal and state funded caseload, caseload achievement rate, and caseload growth rate data from the Caseload – Local Agency and Caseload-State Agency data stores should be incorporated into the data warehouse.

Examples of Caseload Management data warehouse queries include:

- Caseload Achievement by local agencies over time
- Comparison of local agency caseload and health and dietary assessment outcomes

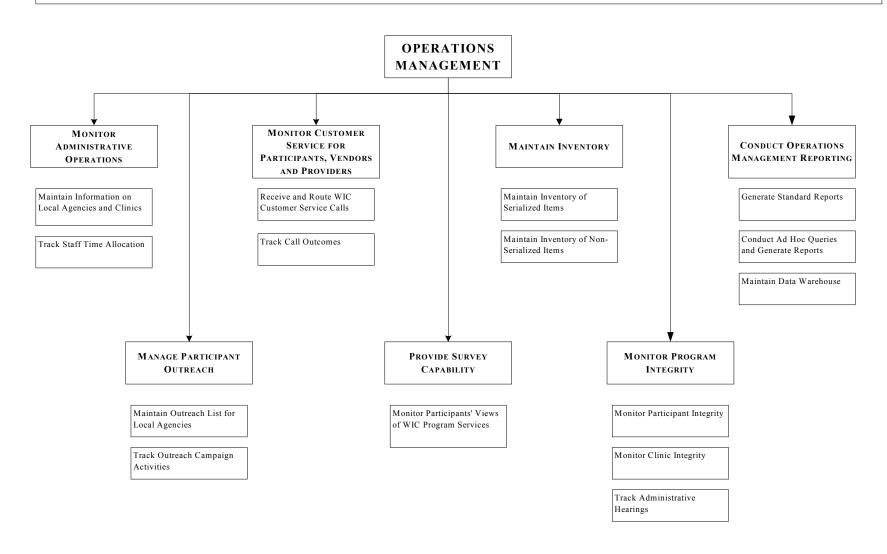
#### 3.7 OPERATIONS MANAGEMENT

The Operations Management functional area is intended to provide general support to WIC local agencies and clinics for a variety of activities and provides program management support for the State agency. It automates administrative tasks and reports such as inventory control for serialized and non-serialized items. It captures contact information and statistics for local agencies and clinics for use in conducting outreach activities. It also provides customer service support and tracks WIC participant satisfaction with program services. Finally, it provides data to help the State assess participant and local agency integrity.

The functions described in this section could be performed by the WIC IS, by one or more non-WIC systems, or by stand alone PC's. In fact, in some cases, it may be more efficient and cost effective for the function to be performed outside of the WIC IS, perhaps on a standalone PC. In addition, adoption of some of the automated functions in this section may not be cost-effective for small State agencies.

- Monitor Administrative Operations
  - Maintain Information on Local Agencies and Clinics
  - Track Staff Time Allocation
- Manage Participant Outreach
  - Maintain Outreach List for Local Agencies
  - Track Outreach Campaign Activities
- Monitor Customer Service for Participants, Vendors and Providers
  - Receive and Route WIC Customer Service Calls
  - Track Call Outcomes
- Provide Survey Capability
  - Monitor Participants' Views of WIC Program Services
- Maintain Inventory
  - Maintain Inventory of Serialized Items
  - Maintain Inventory of Non-Serialized Items
- Monitor Program Integrity
  - Monitor Participant Integrity
  - Monitor Clinic Integrity
  - Track Administrative Hearings
- Conduct Operations Management Reporting
  - General Standard Reports
  - Generate Ad Hoc Queries and Generate Reports
  - Maintain Data Warehouse

# WIC FUNCTIONAL REQUIREMENTS - FUNCTIONAL DECOMPOSITION DIAGRAM OPERATIONS MANAGEMENT



#### 3.7.1 MONITOR ADMINISTRATIVE OPERATIONS

Periodically, State agencies assess the flow of operations at local agencies and clinics. The system should provide information about demographics and participant flow at each local agency. This information could include the total number of education classes given, number of participants certified, and the number of benefits issued during each month. The State and local agency can compare this data to statistical information such as staffing levels and positions, participant-to-staff ratios, nutritionist-to-staff ratios, participants per square foot of space, and cost per participant figures. The data are helpful for improving participant service and clinic flow, and making funds allocation decisions based on local agency infrastructure and capability.

# 3.7.1.1 Maintain Information on Local Agencies and Clinics

<u>Level 1.</u> The system should maintain basic data on each local agency for use in evaluating local agency performance. Where a local agency operates several clinics, the State agency may wish to further break out the data by clinic. The system could use this data for mailing lists, productivity reporting, infrastructure assessment and clinic efficiency. If a State agency uses a patient flow analysis tool, such as the CDC patient flow analysis software, the State agency could use this data for the analysis.

#### **Input:**

## Local Agency

Local Agency Address- County

Local Agency Address- City

Local Agency Address- State

Local Agency Address- Street

Local Agency Address- Zip Code

Local Agency Contact Name

Local Agency Contact Title

Local Agency Email Address

Local Agency Facsimile Number

Local Agency Identification Number

Local Agency Name

Local Agency NSA Cost per Participant

Local Agency Number of Certifying Staff

Local Agency Number of Clerks

Local Agency Number of Clinics

Local Agency Number of Nutritionists

Local Agency Number of Other Staff

Local Agency Regional Identifier

Local Agency Space

Local Agency Telephone Number

# Clinic

Clinic Address- City

Clinic Address- County

Clinic Address- State

Clinic Address- Street

Clinic Address- Zip Code

Clinic Contact Name

Clinic Contact Title

Clinic Email Address

Clinic Facsimile Number

Clinic Identification Number

Clinic NSA Cost per Participant

Clinic Number of Certifying Staff

Clinic Number of Clerks

Clinic Number of Nutritionists

Clinic Number of Other Staff

Clinic Regional Identifier

Clinic Space

Clinic Status Code

Clinic Telephone Number

Local Agency Identification Number

# **Process:**

- Input data on local agencies and clinics and store in Local Agency and Clinic data stores
- Retrieve participation data from the Participation data store
- Retrieve administrative cost information from the NSA Expenditure data store and calculate the NSA cost per participant by local agency
- Upon request, calculate local agency/clinic factors such as No Show Rate, Participants per square Foot, Staff to participant Ratio for clinic and local agency monitoring

#### **Output:**

Screen display or report on local agency/clinic profile data Screen display or report on NSA cost per participant by local agency/clinic Updated Clinic Appointment No Show Rate, Clinic Participants per Square Foot, Clinic Staff to Participant Ratio, Local Agency No Show Rate

#### 3.7.1.2 Track Staff Time Allocation

<u>Level 1.</u> In order to effectively manage local agency participant service, the State agency should assess local agency and clinic staffing and facility resources. The system should support the analysis of each local agency/clinic according to the participants served, local agency/clinic space, and number of staff by type (e.g., certifying staff, clerks, nutritionists, other, bilingual). This information is useful for NSA funds allocation decisions, outreach campaigns and local agency/clinic reviews.

# Input:

Clinic Identification Number

Local Agency Identification Number

Data resident in the system to calculate ratios and rates (e.g., number of participants to number of staff members, square footage of space per participant, etc.). The actual data will vary based on the analyses performed.

#### **Process:**

- Retrieve staff and space information on local agency and clinics from the Local Agency and Clinic data stores
- Retrieve data on number of participants served from the Participation data store
- Retrieve "no show" data from the Scheduled Appointment data store
- Calculate staff-to-participant and footage-to-participant ratios
- Calculate "no show" rates
- Prepare analysis report by local agency/clinic of participant to staff type and square foot of space

#### **Output:**

Screen display or report of local agency/clinic participant to staff/facility statistics

Updated Clinic Appointment No Show Rate, Clinic Participants per Square Foot, Clinic Staff to Participant Ratio, Local Agency No Show Rate

#### 3.7.2 MANAGE PARTICIPANT OUTREACH

The State agency may ask local agencies to increase their caseloads to take advantage of an increased budget or to reach a particular type of participant group (such as migrants or pregnant women). Therefore, the system should maintain contact lists of organizations and individuals such as church groups or physicians that are in regular contact with families that may qualify for the WIC Program, as well as for health or social service organizations that serve individuals who might be WIC candidates. Additionally, outreach campaigns are often quite expensive, so the system might provide information to the State agency that assesses the cost benefit of particular campaigns.

As a part of ongoing operations, the system should track aggregate referrals to other health and social services organizations. Since a part of WIC's mission is to increase participant access to health care and other services, it is important that the system provide the State agency and local agency with data on referral activity.

# 3.7.2.1 Maintain Outreach List for Local Agencies

<u>Level 1.</u> The system should support this function by allowing the State agency or local agency to enter and update the name, address, and telephone number for organizations that may serve potential WIC participants. The system should also record the last time each outreach organization record was updated to help local agencies keep the contact information as current as possible.

# Input:

Outreach Address- City

Outreach Address- State

Outreach Address- Street

Outreach Address- Zip Code

Outreach Contact Name

**Outreach Contact Title** 

Outreach Email Address

Outreach Facsimile Number

Outreach Identification Number

Outreach Organization Name

Outreach Telephone Number

#### **Process:**

- Add, update or delete outreach organizations
- Store in Outreach data store

#### **Output:**

Screen display or report of outreach organizations

# 3.7.2.2 Track Outreach Campaign Activities

<u>Level 1.</u> If a targeted outreach campaign is initiated at some expense (such as television or radio advertisements) the system could provide data to help evaluate the success of the campaign and its cost benefit. The system would need to retrieve data on the additional participants in the area targeted by the campaign over the period of the campaign. The local agency could also ask the participant how he/she heard about the WIC Program as a part of the certification intake process and input this in the system.

After the campaign has concluded, the State and local agency could review the data on additional participants attracted by the campaign and approximate a cost per participant by dividing the additional participants into the total campaign expense. This would provide State and local agencies with information on the success of the campaign and if it was successful, the approximate cost to conduct another campaign in the future.

<u>Level 2.</u> Additionally, the WIC IS should capture narrative text about an outreach campaign. This capability would allow program staff to maintain notes about their campaign and provide "lessons learned" for other staff.

#### Input:

Local Agency Identification Number

Outreach Activity Date

Outreach Activity Description

Outreach Activity Outcome Code

Outreach Activity Time

Outreach Campaign Cost

Outreach Campaign Description

Participant Source of Information About WIC Code

Participation Actual (for month prior to campaign and month following campaign)

#### **Process:**

- Retrieve Participant-Source of Info About WIC data from Participant data store
- Accept user input of Outreach Campaign Cost
- Retrieve data on the number of participants for each local agency involved in the campaign from the Participation data store for the month before and after the outreach campaign
- Compute the participation difference between the participation for the month before and after the outreach campaign
- Divide the cost by the participant difference to obtain a cost per participant

# **Output:**

Screen display or report of outreach campaign cost benefit

# 3.7.3 MONITOR CUSTOMER SERVICE FOR PARTICIPANTS, VENDORS AND PROVIDERS

Customer service is needed to support the WIC IS, particularly in an EBT/ESD environment. Participants, vendors, and program providers all may need support from customer service when using the WIC IS. The system should support the management of calls from participants who have questions about program participation or are having problems using their benefits. Lost or stolen benefits may be reported to a centralized customer service in an electronic benefits environment. Vendors often need to call the State agency with questions about a WIC food sale or when there is an equipment malfunction. Program staff may need to call customer service when there is an equipment malfunction, system problem, or on-site customer problem. Private providers may call with questions when they are referring a participant.

State agencies may choose to provide customer service through outsourcing or in-house WIC personnel. Regardless of the provider of customer service, there is a need for a system to track the disposition of calls. Calls may be received manually or through an Automated Response Unit (ARU). The ARU receives and routes calls based upon the information requested and the workload of Customer Service Representatives. The ARU system should answer the call, determine the size of the call waiting queue, and route the call to the proper source of information. The system should record the type of call and the outcome for quality assurance assessments. If calls are answered manually, the system may only track the type of call, problem, and final resolution.

# 3.7.3.1 Receive and Route WIC Customer Service Calls

<u>Level 1.</u> In a manual environment, when Customer Service receives a call, the receptionist should determine the nature of the request or question. The system should allow the receptionist to log the call and assign a service code and staff (or a customer service team) to be responsible for resolving the issue. (If the caller needs information that is available to the receptionist, he/she should furnish it). The system should provide a complete list of contacts and their area of specialty. The receptionist should be able to route the call to the appropriate staff.

<u>Level 2.</u> In an ARU environment, the ARU should answer the call, and provide a recorded message to triage the call (i.e., ask if the call is to receive basic program information, report an equipment/assistance failure, report lost card/benefits, etc.). The caller is prompted to enter a menu choice for the appropriate response and the IS should accept any applicable input to the Customer Service data store.

<u>Level 3.</u> In an ARU environment, the ARU should route the call based upon the input of the user to the selections provided on the recorded message. Based upon the caller's input, the ARU should determine the appropriate queue for the call, as well as the size of the waiting queue. If the size of the appropriate queue is under a designated threshold, the ARU should determine the shortest appropriate Customer Service Representative call queue in which to place the waiting call. Otherwise, the ARU should provide a call-busy message and place the call in a queue to retry routing after the designated waiting time.

#### **Input:**

Customer Service Identification Number Customer Service Queue Size Customer Service Queue Threshold Customer Service Representative Name Customer Service Request Code Customer Service Request Date

#### **Process:**

- Answer call and provide recorded message or Customer Service Representative
- Input service requested code into the Customer Service data store or accept caller input to menu choices
- Assign appropriate call type based on caller input to menu
- Update Customer Service data store
- Determine appropriate Customer Service Representative Based on Menu Input (ARU)
- Determine Queue Size of Appropriate Customer Service Representatives
- Determine Routing Disposition

# **Output:**

Report of assigned customer service issues

## 3.7.3.2 Track Call Outcomes

<u>Level 1.</u> In a manual environment, once the receptionist has connected the caller with the proper staff, he/she should input the name of the person assisting the caller in the system. The person assisting with the call should enter into the system the nature of the problem. The system should track any actions to resolve the caller's problem. When the problem is resolved, the outcome of the call is entered into the system.

<u>Level 2.</u> In an ARU environment, the receiving Customer Service Representative should update the call tracking entry with the disposition of the call. If necessary, standard escalation procedures should be followed to ensure that the call is routed to the next higher intervention level needed to resolve the problem.

# Input:

Customer Service Action Taken Code Customer Service Action Taken Date Customer Service Identification Number Customer Service Problem Description Customer Service Problem Resolution Code Customer Service Problem Resolution Date Customer Service Representative Name

# **Process:**

- Accept Customer Service Representative Input
- Route call to next level of escalation
- Update problem resolution data in Customer Service data store

# **Output:**

Screen display or report of customer service calls and outcomes

#### 3.7.4 PROVIDE SURVEY CAPABILITY

States may wish to provide a generic capability to conduct surveys and track survey responses for various aspects of the WIC Program. The system may support fully automated collection of survey data (i.e., provide a survey form online for participants to complete) or manual entry of survey results (i.e., enrollees are asked to complete a manual questionnaire or are asked questions in a personal interview and their responses are entered into the system). Regardless of the degree of data collection automation, the system should capture the results for each survey participant and generate a summary assessment.

# 3.7.4.1 Monitor Participants' Views of WIC Program Services

<u>Level 1.</u> The WIC Program periodically conducts surveys to obtain participant views of the services provided. The system can be used to collect and summarize survey information, thereby freeing staff from this time-consuming task. The survey may include questions about the participant's experience at certification, the usefulness of the nutrition education provided, whether he/she obtained the recommended health care service and her satisfaction with shopping for food benefits. The State agency assesses the survey to obtain information on what is working well and what needs improvement.

The State agency may also wish to do periodic surveys of vendors to determine if there are problem areas in dealing with WIC participants or complying with requirements. Vendors may have suggestions on ways to make the shopping experience more convenient for WIC participants.

# **Input:**

Clinic Identification Number

Local Agency Identification Number

Participant Identification Number

Survey Question Identification Number

Survey Question Text

Survey Question WIC Service Type Code

Survey Questionnaire Identification Number

Survey Questionnaire Question Sequence Number

Survey Questionnaire Survey Name

Survey Questionnaire Survey Type Code

Survey Response Nutrition Education Size

Survey Response Nutrition Education Type

Survey Response Opinion Score

Survey Response WIC Service Date

Survey Response WIC Service Type Code

Vendor Identification Number

#### **Process:**

- Design survey instrument for type of customer and services received and update Survey Questionnaire and Survey Question data stores
- Accept user entered survey results and update Survey Response data store
- Generate analyses of survey responses

# **Output:**

Report of customer survey opinions

#### 3.7.5 MAINTAIN INVENTORY

State agencies maintain an inventory of many types of items needed for administration of the WIC Program. Some items, such as food instruments and EBT cards are negotiable instruments that need to be safeguarded from misuse. Other items are capital assets such as computer equipment and breast pumps. All of these items should have serial numbers to track their use and disposition.

There are many other stock items, such as publications, brochures, and reporting forms, that are routed to the proper location in adequate amounts and when supplies run low. The State Agency also tracks the use of these non-serialized items.

# 3.7.5.1 Maintain Inventory of Serialized Items

Level 1. When the State agency orders and receives items such as food instruments or EBT cards, each item should have a unique number. The system should record the shipments by the serial numbers of items in storage. When these items are shipped to local agencies for use, the system should record the beginning and ending serial numbers of the shipment and the local agency to receive the shipment. The system should calculate the number of days supply and have a projected date for replenishment based on typical usage. The local agencies can also use this functionality for tracking when they receive and use serialized items. As serialized items are used, the stock remaining is decremented.

For equipment, each item should have an identification number. The system should maintain a list of all equipment, where the equipment is located and the date of receipt. When equipment is no longer useful, the State agency should input the date of retirement in the record.

#### Input:

Item Stock- Serialized Batch Beginning Serial Number

Item Stock- Serialized Batch Ending Serial Number

Item Stock- Serialized Card Stock Batch Number

Item Stock- Serialized Card Stock Serial Number

Item Stock- Serialized Date Received by Local Agency

Item Stock- Serialized Date Received by State Agency

Item Stock- Serialized Date Shipped to Local Agency

Item Stock- Serialized Equipment Identification Number

Item Stock- Serialized Equipment Retirement Date

Item Stock- Serialized Food Instrument Identification Number

Item Stock- Serialized Food Instrument Stock Batch Number

Item Stock- Serialized Type Code

Local Agency Identification Number

#### **Process:**

- Input serial numbers when shipments are received by State agency
- Input serial numbers or equipment identification numbers for items sent to a local agency
- Input local agency code for the local agency receiving the shipment
- Calculate number of day's stock and anticipated replenishment date
- Update Item Stock-Serialized data store

# **Output:**

Display screen or report of serialized item stock inventory status

# 3.7.5.2 Maintain Inventory of Non-Serialized Items

<u>Level 1.</u> Non-serialized items such as forms, publications, or special formula are needed by local agencies to conduct the program. The State agency should maintain an inventory of the amount of each item in storage. The system should estimate the need for each item based on historical use, and project the date for replenishment based on historical use rates. Another approach is to ship items when requested by the local agencies, and maintain a supply on hand based on the number of days lead-time needed to obtain a shipment.

#### Input:

Item Stock- Non-Serialized Entry Date

Item Stock- Non-Serialized Identification Number

Item Stock- Non-Serialized Number of Items Received by Local Agency

Item Stock- Non-Serialized Number of Items Received by State Agency

Item Stock- Non-Serialized Number of Items Shipped to State Agency

Item Stock- Non-Serialized Received by Local Agency Date

Item Stock- Non-Serialized Received by State Agency Date

Item Stock- Non-Serialized Shipped to Local Agency Date

Item Stock- Non-Serialized Type Code

Local Agency Identification Number

## **Process:**

- Input number of items when shipments are received by State agency
- Input number of items for items sent to a local agency
- Input local agency code for the local agency receiving the shipment
- Update Item Stock-Non-Serialized data store

# **Output:**

Screen display or report of item stock non-serialized inventory status

#### 3.7.6 MONITOR PROGRAM INTEGRITY

The system must maintain data that assists the State and local agency in monitoring program integrity. For participant integrity, this includes a system for reviewing data to determine if false eligibility information was provided (e.g., household size, or income). It also reviews for the fraudulent use of benefits (e.g., substituting foods, selling foods) and for dual participation<sup>51</sup>.

For clinic integrity, the system should review data to detect suspicious patterns. The most likely fraudulent activity is creating fictitious records to obtain benefits or applying lenient eligibility determinations for friends and relatives. The system review should also pinpoint those local agencies or clinics where there are limited separation of duties which make fraudulent behavior easier to perform.

# 3.7.6.1 Monitor Participant Integrity

<u>Level 1.</u> To monitor program integrity, the State agency may wish to determine if any participants are routinely shopping at a vendor some distance from their home. This pattern might indicate a preference for a vendor that is willing to permit abusive behavior.

Complaints also provide a source of information from persons who are suspicious of a participant based on their financial circumstances or who has observed fraudulent behavior such as selling food benefits or vendors who report participants that have tried to violate WIC Program rules.

When a participant has abused the program and the local agency has imposed a sanction or claim, the local and State agency must track the type of abuse and action taken. The system should support reporting such violations and the claims imposed and collected.

# Input:

Complaint Date
Complaint Identification Number
Complaint Resolution
Complaint Source Type

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<sup>&</sup>lt;sup>51</sup> Dual participation and dual enrollment checks are performed at certification and benefit issuance. See section 3.1.1.4.

Complaint Status

Complaint Subject

**Complaint Summary** 

Complaint Type Code

Dual Participation Potential Match Applicant CSFP

Dual Participation Potential Match Applicant Other State Agency

Dual Participation Potential Match Applicant WIC

Dual Participation Potential Match Certified CSFP

Dual Participation Potential Match Certified Other State Agency

Dual Participation Potential Match Certified WIC

Participant Address- Apartment

Participant Address- City

Participant Address- State

Participant Address- Street

Participant Address- Zip Code

Participant Identification Number

Sanction Case Appeal Indicator

Sanction Case Appeal Outcome Code

Sanction Case Current Status

Sanction Case Identification Number

Sanction Case Start Date

Sanction Case Type Code

Sanction Effective Date

Sanction Type Code

Vendor Address- City

Vendor Address- State

Vendor Address- Street

Vendor Address- Zip Code

Vendor Identification Number

#### **Process:**

- Retrieve data on participant certifications from the Participant data store and determine if there are multiple duplications in certification data (e.g. name, address, date of birth, etc.)
- Load participant data from other State agencies or CSFP and match that participant data against the State's participant data to determine if there are any matches
- Store matches in the Dual Participation Potential Match data store
- Input complaint data on participants in the Complaint data store and generate report of complaints for follow-up action
- Retrieve data from the Food Instrument or Food Benefit Household Account and Participant data stores and determine the vendor where the participant redeemed her food benefits

- Compare vendor and participant addresses to determine how many participants are shopping at vendors outside the normal geographic radius of the participant's address
- Input data on participant violations, sanctions and claims imposed and claims collected along with the corresponding date in the Sanction data store
- Separate clinics into peer groups according to caseload size to set baseline trend data for differing clinic caseloads
- Monitor reports based on the baseline trend data (See 3.7.7.2: Generate Ad Hoc Queries and Generate Reports)

# **Output:**

Screen display or report on potential dual participation matches Screen display or report of complaints about participants Screen display or report of participants shopping outside their neighborhoods

Screen display or report of participant sanctions and claims status

# 3.7.6.2 Monitor Clinic Integrity

Level 1. For clinic integrity reviews, the system should compare each local agency's data to all local agencies to determine if the particular local agency is outside the norm. Suspicious patterns could include low no-show rates, low attendance rate at nutrition education classes, disproportionate number of infants (who have high redemption value food benefits), high incidence of twins, unusually high number of certifications, production of food instruments or EBT cards at unusual hours and a large number of participants with no reported income. The system should also identify potential conflicts of interest that may develop when an employee is responsible for both certifying eligibility and issuing benefits or when an employee is also a WIC participant.

#### **Input:**

Clinic Identification Number Local Agency Identification Number

Additional inputs will vary depending on the type of clinic analyses conducted.

#### **Process:**

- Retrieve data for all local agencies on:
  - No-show rates (Scheduled Appointment data store)

- Attendance rate at nutrition education classes (Education Offer data store)
- Number of infants (Participation data store)
- Number of twins (Participant data store)
- Number of certifications (Participant data store)
- Participants with no reported income (Participant data store)
- Benefit issuance activities that were reported outside of normal hours of operation (Food Instrument or Food Benefit Household Account data stores)
- Other factors the State wants to analyze
- Calculate percentages of no-shows, participants not receiving nutrition education, infants, twins, certifications, and issuance of benefits at abnormal hours for each local agency
- Calculate an average for all local agencies
- Compare each local agency average to the average of all local agencies

#### **Output:**

Screen display or report of potential clinic abuse indicators

# 3.7.6.3 Track Administrative Hearings

<u>Level 1.</u> When participant or clinic abuses are identified, the WIC Program may take sanction action. In the case of such actions, the participant and/or clinic staff may appeal the action and the State must conduct administrative hearings. The system should be able to track the disposition of the administrative hearings process to maintain a history of the program integrity case and its eventual outcome. The system can aggregate this data and track historical trends in program abuse.

#### **Input:**

Administrative Hearing Date

Administrative Hearing Description

Administrative Hearing Identification Number

Administrative Hearing Outcome Code

Administrative Hearing Outcome Date

Administrative Hearing Outcome Description

Administrative Hearing Type Code

Clinic Identification Number

Local Agency Identification Number

Participant Identification Number

Vendor Identification Number

Vendor Outlet Identification Number

# **Process:**

- Add, update, and delete Administrative Hearings data store
- Generate report on Status of Participant Administrative Hearings

# **Output:**

Screen display or report on participant hearing status

#### 3.7.7 CONDUCT OPERATIONS MANAGEMENT REPORTING

The system should produce standard reports for data needed on an ongoing basis. The State or local agency may wish to review some other data on an ad hoc basis. Therefore, the examples of reports are divided according to data reports that are critical to routine operations, ad hoc data reports that are done as needed, and data warehousing reports.

# 3.7.7.1 Generate Standard Reports

Standard reports provide pre-defined data sets in a consistent format and can be requested through a report menu. These recurring reports can be displayed on the screen, printed in hard copy, or saved to a file for later printing or import into another software product. To allow for some limited customization of standard reports, the system may allow users to enter data selection or sort parameters to limit the scope of data included in the report or method of presenting the data. Standard operations management reports include the following:

- Report of Complaints About Participants List of participants for which complaints are filed and nature of complaint.
- Report of Customer Service Calls and Outcomes Provide log of type of calls received and their disposition. Customer Service reports generated by an ARU can provide the number of calls handled by type (i.e., by provider, Participant, and vendor), average time to handle call, reason for call, number of automated versus operator assisted calls, and time to answer calls.
- Report of Local Agency/Clinic Participant To Staff/Facility Statistics –
  Provide analysis of ratio of local agency/clinic participant to staff type
  and square foot of space to enable State and local agencies to monitor
  and assess the workload of the Local Agency.
- Report Of Non-Serialized Item Stock Inventory Status Provide status of non-serialized items in storage and shipped to local agencies.
- Report of Outreach Organizations Enable local agencies to review outreach organization information and provide mailing labels in order to increase participation levels when additional caseload is assigned by the State agency.
- Report Of Participant Violations, Sanctions, and Claims Provide reports on participant violations, sanction imposed and any claims collected.

- Report of Participants Shopping Outside Their Neighborhoods List of participants that are shopping at vendors outside the normal geographic boundary of their addresses.
- Report Of Potential Clinic Abuse Indicators Provide data on patterns that may indicate clinic abuse.
- <u>Report of Referrals to/from WIC By Program/Agency</u> Support the analysis of referral program effectiveness by identifying those external health and social service agencies that refer Participants to WIC or receive referrals from WIC.
- Report of Serialized Item Stock Inventory Status Provide status of serialized items in storage and shipped to local agencies.
- Report on Local Agency/Clinic Profile Data Provide a snapshot of local agency or clinic operations for review by State agency or preparation for site visitation. Profile will include information that reflects the size, capacity, productivity, and operating costs of the local agency or clinic.
- <u>Report on NSA Cost Per Participant By Local Agency/Clinic</u> Provide summary comparison of the NSA cost per participant among local agencies.
- Report On Participant Hearing Status Provide summary of participant hearings status.
- Report on Potential Participant Dual Participation Matches List of participants that may be participating in another local agency within the State or in other State agencies or CSFP.

## 3.7.7.2 Generate Ad Hoc Queries and Generate Reports

The system should have ad hoc query capabilities.<sup>52</sup> Some sample ad hoc queries in this area include:

- Clinic redemption rates (if they are increasing, there may be a problem)
- Clinics serving a greater number of participants than the service area shows as eligible (especially in the infant category)
- Decrease in no-show rates (normally, would be desirable, however, a sudden drop in no-show rates, could mean that staff are pretending to be those participants and taking the vouchers
- Decrease in the number of voids
- Disproportionate numbers of applications that indicate "twins"
- Fluctuations in infant caseload within a given clinic
- Illogical sequencing in food instrument redemption patterns (serial numbers, etc.)

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<sup>&</sup>lt;sup>52</sup> Ad hoc reporting is a future core function.

- Infant caseload (Is it normal for the clinic size?)
- Infant formula issuance as compared to the number of post-partum women
- Large number of food instruments redeemed outside a clinic service area
- Large number of one clinic's redemption by one or two vendors, or a small number of vendors in a town/county (may indicate employee/vendor collusion)
- Outreach Campaign Cost Benefit Provide a cost benefit analysis for targeted campaigns based on number of participants added to the Program
- Participant addresses that indicate a P.O. Box (focus on urban areas)
- Participant Integrity Review Provide reports on a particular Participant's dual participation, complaints filed, and other analysis reports that detect possible abuses.
- Report of Customer Survey Opinions By Local Agency Provide results of surveys of participant opinions on WIC Program service
- Significant increase/decreases in caseload
- Special formula issuance (Is it normal for the clinic size?)
- The numbers of automatically-terminated participants that are being reinstated and redeeming food instruments
- The use of manual vouchers (may be easier to issue than a computergenerated vouchers)

#### 3.7.7.3 Maintain Data Warehouse

Some topics for analysis from this functional area using the capabilities of a data warehouse include:

- <u>Clinic Integrity Review</u> Provide reports using combined data including system access data that identify patterns over time that may indicate clinic abuse
- <u>Local Agency Performance</u> Combine data on participation, nutrition education classes offered and attended, outreach contacts, referrals to and from agencies, financial administration, customer service data, and history of abuse to obtain broad view of an agency's performance over time
- <u>Participant Integrity Review</u> Combine vendor, participant, and benefit redemption data to identify possible patterns of abuse.

# 3.8 VENDOR MANAGEMENT

The Vendor Management functional area is intended to support the management of the retail vendor aspect of the WIC Program. It tracks the vendor authorization process; captures information about authorized vendors; monitors vendor training and communications, helps identify potentially abusive vendor practices for which additional monitoring or investigation is needed; supports record audits; maintains a comprehensive vendor profile, including information about compliance activities, and supports coordination of sanctions with the Food Stamp Program (FSP). In addition, the data collected under this function supports the annual electronic transmission to FNS of The Integrity Profile (TIP) Report<sup>53</sup>.

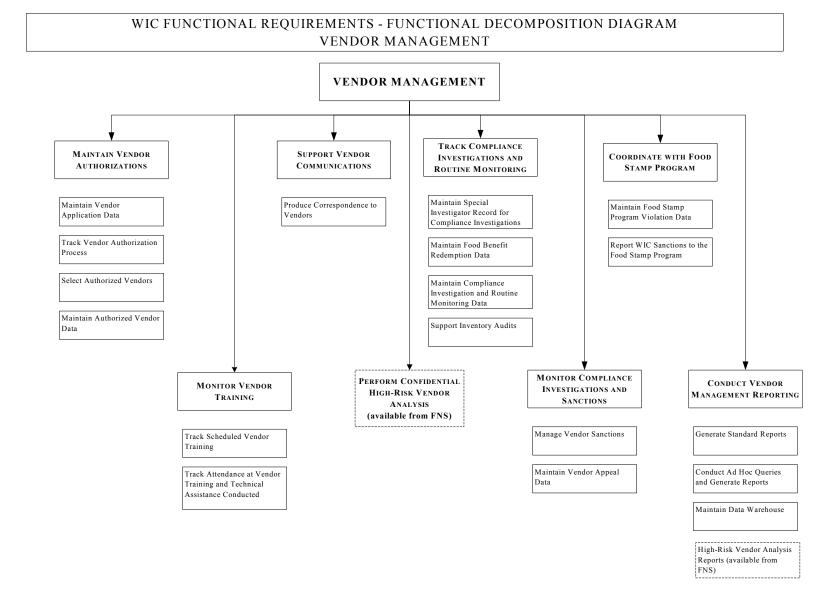
Vendor Management consists of the following functions:

- Maintain Vendor Authorizations
  - Maintain Vendor Application Data
  - Track Vendor Authorization Process
  - Select Authorized Vendors
  - Maintain Authorized Vendor Data
- Monitor Vendor Training
  - Track Scheduled Vendor Training
  - Track Attendance at Vendor Training and Technical Assistance Conducted
- Support Vendor Communications
  - Produce Correspondence to Vendors
- Perform Confidential High-Risk Vendor Analysis<sup>54</sup>
- Track Compliance Investigations and Routine Monitoring
  - Maintain Special Investigator Record for Compliance Investigations
  - Maintain Food Benefit Redemption Data
  - Maintain Compliance Investigation and Routine Monitoring Data
  - Support Inventory Audits
- Monitor Sanctions and Appeals
  - Manage Vendor Sanctions
  - Maintain Vendor Appeal Data
- Coordinate with Food Stamp Program
  - Maintain Food Stamp Program Violation Data
  - Report WIC Sanctions to the Food Stamp Program

<sup>&</sup>lt;sup>53</sup> The TIP report is being updated. Please contact FNS for TIP data elements when the requirements for the report have been finalized.

<sup>&</sup>lt;sup>54</sup> Contact FNS for a copy of this functional description.

- Conduct Vendor Management Reporting
  - Generate Standard Reports
  - Conduct Ad Hoc Queries and Generate Reports Maintain Data Warehouse



#### 3.8.1 MAINTAIN VENDOR AUTHORIZATIONS

The State agency selects and uses authorized vendors to provide WIC-approved foods to participants in retail-based food delivery systems. Authorized vendors provide supplemental foods to WIC participants and are reimbursed with WIC funds. Vendors must apply to become authorized WIC vendors and periodically must reapply to maintain WIC authorization. State agencies may authorize individual vendors on a continuing basis or may authorize all vendors at the same time according to a designated schedule. State WIC agencies may limit their authorized vendors to a number that ensures adequate participant access and that they can effectively manage. They determine which vendors to authorize based on whether vendors meet or exceed a State agency's selection criteria. State agencies must use the mandatory selection criteria stated in the Federal regulations. State agencies consider several factors in determining whether to authorize a vendor such as the varieties and quantities of WIC-approved foods an applicant vendor stocks, prices of WIC authorized foods, prior WIC and Food Stamp Program compliance history, Food Stamp authorization number, and the vendor's business integrity. State agencies may deny a vendor authorization, and the vendor may appeal such denials.

The system should capture information on vendors applying for WIC authorization, including: information submitted on the WIC vendor application, historical data regarding the vendor's prior WIC authorization, and information collected during preauthorization or other monitoring visits, as applicable. This information includes basic reference data about the vendor, as well as food price data that are used by this and other functional areas within the system. The WIC IS may also track the progress of the vendor authorization process for individual vendors.

# 3.8.1.1 Maintain Vendor Application Data

<u>Level 1.</u> The system should capture and maintain data about the vendors that apply for WIC authorization. These data include reference data such as the vendor's name, location, ownership, business volume and, if applicable, Food Stamp authorization number.

<u>Level 2.</u> The system should also include data about the prices for WIC-authorized foods. These data are captured during the vendor application process to compare the vendor's prices to other vendors seeking authorization. Once authorized, a vendor may update its prices by submitting revised price lists in accordance with its State agency requirements. These updates vary from monthly submissions to a single submission covering the entire authorization period. In an EBT system, it is possible to have automatic, continuous food price updates based on ongoing transaction data.

<u>Level 3.</u> To assist in vendor authorization determinations, the system should provide a history of vendor compliance, including any warnings or sanctions imposed against a particular vendor and its outlets and a history of a vendor's participation in required training. The data regarding vendors' prior WIC compliance and on-site monitoring visits are captured and maintained by other functions within the Vendor Management functional area.

<u>Level 4.</u> The system should provide information that will help the State agency determine the appropriate number of WIC vendors to authorize in specific locations, and provide vendor characteristics to help determine the best vendors to authorize.

#### **Input:**

Vendor Address- City

Vendor Address- State

Vendor Address- Street

Vendor Address- Zip Code

Vendor Authorization Expiration Date

Vendor Authorization Start Date

Vendor Authorization Status

Vendor Business Year End Month/Year

Vendor Business Year Start Month/Year

Vendor Chain Code

Vendor Contact Name- First

Vendor Contact Name- Last

Vendor Contact Name- MI

Vendor Contact Telephone Number

Vendor Contact Title

Vendor Days of Operation

Vendor Federal Tax Identification Number

Vendor Food Inventory Shelf Space

Vendor Food Stamp Identification Number

Vendor Food Stamp Sanctions

Vendor Hours of Operation

Vendor Identification Number

Vendor Last Modified Date

Vendor Last Modified User

Vendor Mailing Address- City

Vendor Mailing Address- State

Vendor Mailing Address- Street

Vendor Mailing Address- Zip Code

Vendor Multiple Locations Flag

Vendor Name

Vendor Number of Cash Registers

Vendor Owner Name- Last

Vendor Owner Name- First

Vendor Owner Name- MI

Vendor Owner Telephone Number

Vendor Sales Food

Vendor Sales Food Stamps

Vendor Sales Non-Foods

Vendor Sales WIC

Vendor Scanner Availability

Vendor Scanner Screens WIC Purchases

Vendor Type Code

## The following data elements are repeated for each vendor outlet:

Vendor Identification Number

Vendor Outlet Address- City

Vendor Outlet Address- State

Vendor Outlet Address- Street

Vendor Outlet Address- Zip Code

Vendor Outlet Identification Number

Vendor Outlet Number Cash Registers

Vendor Outlet Sanction Points

Vendor Outlet Status Code

Vendor Outlet Telephone Number

# **Process:**

• Input vendor characteristics data from vendor applications for new and currently authorized vendors and store results in Vendor data store

## **Output:**

Screen display or report of vendor applications

#### 3.8.1.2 Track Vendor Authorization Process

Some State agencies may use the system to provide a simple tracking capability of the vendor authorization process. This capability is especially useful for State agencies that process vendor authorizations throughout the year rather than all at one time. This process can last several weeks, with a number of processing steps required to consider and decide on each vendor application. This could include issuing requests for applications, assessing all applications for completeness and obtaining any missing information, and conducting on-site visits to assess whether the vendor meets WIC requirements.

<u>Level 1.</u> To support vendor authorization tracking, the system should record the steps in the authorization process for each vendor, including scheduled and actual completion dates. The system should produce a screen display or report showing the status of all vendor authorizations, as well as an exception report showing only actions overdue.

<u>Level 2.</u> The system could produce a contract renewal list for State agencies that authorize vendors throughout the year and also produce customized notifications and other correspondence.

#### **Input:**

Vendor Authorization Activity Code

Vendor Authorization Activity Complete Date

Vendor Authorization Activity Scheduled Date

Vendor Authorization Expiration Date

Vendor Authorization Ineligibility Reason Code

Vendor Authorization Start Date

Vendor Authorization Status

Vendor Identification Number

#### **Process:**

• Input activities scheduled and completed for each vendor and store results in Vendor Authorization Progress data store

# **Output:**

Screen display or report on vendor authorizations actions scheduled and completed

#### 3.8.1.3 Select Authorized Vendors

<u>Level 1.</u> Prior to selecting authorized vendors, the State agency may choose to use limitation criteria for vendors in a certain area. For example, this may be done by calculating a participant to vendor ratio for a certain area (e.g., zip code or county) to determine an optimum number of vendors to ensure participant access to food benefits.

Once the State agency has assembled all vendor application data, it must evaluate the information to determine which vendors best meet the State agency's needs. The State agency could divide the selection process into two components:

- The first component is to evaluate whether the applicant vendors meet the basic qualifying criteria for WIC authorization. This evaluation could include noting any vendors with a history of insufficient varieties or quantities of WIC-approved foods in stock or WIC and/or Food Stamp Program noncompliance or sanctions.
- For the second component, the system would compare vendor prices by area and/or peer groups. The system would array the vendors that met the basic qualifications by location and list the vendor applicants in order of prices. Based on the desired number of vendors, the system would highlight the vendors needed for each area or peer group from among the vendors with the lowest prices.

Once the list of selected vendors is established, the system should generate notices to these vendors for mailing vendor agreements and other material, as well as denial notices for applicant vendors not selected for WIC authorization.

Level 2. Some State agencies use a competitive bid system for selecting vendors. In these systems, the same steps as previously discussed occur, but vendors commit to charging WIC a specific contract price for all WIC-authorized food items sold during the contract period. For such systems, the system should store the contract price as a NTE price for each vendor. When food benefits are redeemed, the vendor would charge the shelf price. However, when the vendor requests payment, the contract price is compared to the redemption price. If the contract price is less than the redemption amount, the vendor is billed for the difference. Other States may enter into a contract where the vendor agrees to charge a specific price for WIC-authorized foods, and while these prices are competitive, they are not based on bid solicitations.

#### **Input:**

Food UPC/PLU Code

Food UPC/PLU Vendor Specific UPC Average Price

Vendor Compliance Activity Violation Indicator Code

Vendor Food Inventory Shelf Space

Vendor Food Stamp Sanctions

**Vendor Monthly Redemptions** 

**Vendor Outlet Sanction Points** 

Vendor Peer Group Designation Code

Vendor Price List Late

Vendor Sales Food

Vendor Sales Food Stamps

Vendor Sales Non-Foods

Vendor Sanction Points to Date

#### **Process:**

- Retrieve history of violations on vendors who are seeking authorization/reauthorization from the Vendor Compliance Activity Store
- Retrieve a compliance history on vendors who are seeking authorization/reauthorization from the Sanction data store
- Retrieve vendor application data from the Vendor data store
- Calculate the food package price for each vendor based on the food price survey data submitted on the application by inputting the price for each food and on the food price provided by the vendor by UPC
- Array vendors by price for each location
- Select the required number of vendors for authorization
- For competitive bid systems, store the vendors contract price for food as the NTE value in the Food/UPC data store

# **Output:**

Screen display or report of all violations and compliance activities for the vendor within a user specified timeframe

Screen display or report of vendor's food prices by location

Screen display or report of participant to applicant vendor ratio by location

List of selected vendors

#### 3.8.1.4 Maintain Authorized Vendor Data

<u>Level 1.</u> Once vendors have signed the vendor agreement, the system should assign a vendor identification number and update the Vendor data store.

# **Input:**

Vendor Authorization Status Vendor Identification Number

#### **Process:**

- Input vendor identification number for newly authorized vendors
- Update Vendor Authorization Status to authorized
- Update Vendor Authorization Start Date and Vendor Authorization Expiration Date

# **Output:**

List of authorized vendors by identification number

#### 3.8.2 MONITOR VENDOR TRAINING

State agencies are required to provide training to vendors annually to explain their role and responsibilities under the WIC Program. Training is provided to vendors at initial authorization and also to vendors where routine visits identify deficiencies that warrant additional training. The vendor may also request vendor training.

Vendor training is vital, because it helps ensure that vendors understand their WIC responsibilities, including maintaining sufficient varieties and quantities of WIC-authorized foods, delivering supplemental foods to certified participants (or proxies), ensuring that participants use their food instruments properly, and redeeming food instruments in accordance with WIC procedures. Vendor training also ensures that vendors are aware of vendor rules and procedures, so that if program noncompliance or violations occur, vendors cannot claim they were unaware of program rules and procedures.

The system should support vendor training by recording and reporting on scheduled training sessions, and the vendor's attendance at or receipt of required training. The system should enable WIC staff to identify which vendors have not fulfilled their training requirements.

#### 3.8.2.1 Track Scheduled Vendor Training

<u>Level 1.</u> The system should capture and maintain data necessary for tracking vendor training and attendance to avoid duplication of data entry. For each training session, the data should reflect the scheduled date, location (e.g., whether on site or at WIC offices or some other central location conducive to group training), and the expected number of attendees for each vendor.

# Input:

Education/Training Offer Date
Event Slot Identification Number
Master Calendar Identification Number
Resource Identification Number
User Identification Number
Vendor Identification Number

#### **Process:**

• Input scheduled vendor training dates, locations and vendor, which should attend and record in Education/Training Offer and Event Slot data store

#### **Output:**

Vendor training schedule Vendor training notice

# 3.8.2.2 Track Attendance at Vendor Training and Technical Assistance Conducted

<u>Level 1.</u> The system should capture, maintain, and report data about each vendor's attendance at the scheduled vendor training.

# **Input:**

Education/Training Offer Status Code

**Event Slot Identification Number** 

Scheduled Appointment Date

Scheduled Appointment Identification Number

Scheduled Appointment Missed Reason

Scheduled Appointment Number of Actual Attendees

Scheduled Appointment Outcome Code

Scheduled Appointment Time

Vendor Identification Number

#### **Process:**

• Input vendors' attendance at planned sessions and record in Education/Training Offer and Scheduled Appointment data store

#### **Output:**

Screen display or report of vendor attendance at training sessions

#### 3.8.3 SUPPORT VENDOR COMMUNICATIONS

State agencies periodically send notices and other correspondence to vendors. These communications include requests for food prices, notifications of rejected food instruments, and other periodic and ad hoc communications. The system can automate the production of communications.

## 3.8.3.1 Produce Correspondence to Vendors

<u>Level 1.</u> The system should enable users to produce mailing labels for individual vendors, or vendor outlets, and to produce labels in bulk for mass mailing of notifications. The system should enable the user to enter specific vendor identification numbers and vendor outlet identification numbers to produce short batch runs of labels.

<u>Level 2.</u> The system should merge vendor data with text entered using a word processor to produce vendor correspondence.

# **Input:**

Vendor Identification Number Vendor Outlet Identification Number

# **Process:**

- Input selection of authorized vendors to receive information or correspondence
- Retrieve name and address information from Vendor data store

# **Outputs:**

Mailing labels
Customized correspondence

## 3.8.4 PERFORM CONFIDENTIAL HIGH-RISK VENDOR ANALYSIS

An important function of vendor management is to identify vendors that have a high probability of violating program requirements<sup>55</sup>. A full description of the automated functions pertaining to this area of vendor management can be obtained by contacting FNS. When requesting a copy of these functional descriptions, please refer to FRED Section 3.8.4: Perform Confidential High-Risk Vendor Analysis.

<sup>&</sup>lt;sup>55</sup> This is a core function.

#### 3.8.5 TRACK COMPLIANCE INVESTIGATIONS AND ROUTINE MONITORING

State agencies periodically conduct compliance investigations and routine monitoring of vendors. Routine monitoring usually includes an examination of vendor facilities to ensure all WIC-approved foods are available in sufficient variety and quantity, confirming price survey data, and observing whether cashiers are following required procedures for accepting and processing food instruments.

Investigations are conducted as undercover compliance buys in which an investigator poses as a WIC participant or proxy and transacts one or more food instruments to determine whether the vendor is committing program violations, such as overcharging for supplemental foods, accepting food instruments as payment for unauthorized foods, or exchanging food instruments for cash.

A State agency usually conducts compliance buys when a vendor is flagged as high-risk. However, the State agency may also do buys on non-high-risk vendors to determine if fewer violations occur among the non-high risk vendors than the high-risk vendors. If the rate of program violations for non-high risk vendors is as high or higher than for high-risk vendors, then the State agency should reevaluate its high-risk identification system to determine if it can flag high-risk vendors more successfully.

A State agency may also conduct an investigation referred to as an inventory audit. In this type of investigation, a vendor's WIC redemptions are compared to its inventories of supplemental foods during the same period of time to determine if a vendor claimed reimbursement for the sale of a food item that exceeds the amount of documented inventory of that item for that time period.

Compliance buys and monitoring visits are a vital part of vendor management in the WIC Program. They serve to identify vendor non-compliance and provide evidence needed to sanction vendors. These activities also serve as a significant deterrent to vendor fraud and abuse.

The system should record data about monitoring visits and investigations as part of a comprehensive profile of vendors' WIC practices. This is necessary for

imposing sanctions, responding to appeals of sanctions, and targeting future compliance activities.

# 3.8.5.1 Maintain Special Investigator Record for Compliance Investigations

<u>Level 1.</u> When a State agency conducts compliance buys at vendor outlets, it needs a way to identify and track food instruments issued to compliance investigators. Because food instruments are issued by the WIC IS only to individuals recorded in the database, the system should enable the addition, modification, and deletion of investigator data as a special category of participant.

The system should capture compliance investigator data and produce an official WIC Identification Card for investigators who visit vendors to perform compliance buys (if that State issues participant Identification Cards). However, to protect the investigator's identity, the system should not include information about an investigator or food instruments issued to investigators in any caseload reports or in summary statistics regarding food instruments issued and redeemed.

#### **Input:**

Local Agency Identification Number

Participant Address- Apartment

Participant Address- City

Participant Address- State

Participant Address- Street

Participant Address- Zip Code

Participant Category Code

Participant Certification Date

Participant Certification End Date

Participant Identification Number

Participant Name-First

Participant Name- Last

Participant Name- MI

Participant Nutrition Risk Criteria Code

#### **Process:**

• Add or update a participant record for the investigation the Participant data store to enable the issuance of food instruments

## **Output:**

Participant identification card Listing of investigator participant records

# 3.8.5.2 Maintain Food Benefit Redemption Data

Level 1. Once the investigator has completed a compliance buy, the system must retrieve the data for the food benefits redeemed as a result of the compliance buy. The redemption data are compared to data collected by the investigator during the compliance buy to determine whether the vendor transacted and redeemed the food investigator's instruments in accordance with program rules. This analysis would include whether the vendor redeemed the food benefits for more than the shelf price recorded by the investigator or any other irregularities. The food instruments or records of the transaction may be used as evidence in the event that a vendor is sanctioned for program non-compliance.

# Input:

Food Instrument Amount Billed to Vendor (post-edit)

Food Instrument Amount Collected From Vendor (post-edit)

Food Instrument Amount Not Paid (pre-edit)

Food Instrument Estimated Value

Food Instrument Identification Number

Food Instrument Issuance Date

Food Instrument Maximum Value

Food Instrument Redemption Batch

Food Instrument Redemption Value

Food Instrument Reject Count

Food Instrument Reject Reason Code

Food Instrument Use/Disposition Date

Food Instrument Valid End Date

Food Instrument Valid Start Date

Food Instrument Vendor Redemption Date

Food Instrument Void Date

Participant Identification Number

Vendor Identification Number

Vendor Outlet Identification

#### **Process:**

• Retrieve the food benefit redemption data for the vendor under investigation using the investigator's Participant Identification Number

## **Output:**

Food benefit redemption prices for supplemental foods purchased during a compliance buy

#### 3.8.5.3 Maintain Compliance Investigation and Routine Monitoring Data

<u>Level 1.</u> The system should capture, maintain, and report data about monitoring activities. The data should include the dates the compliance buys or monitoring visits were conducted and the tasks performed as part of each activity, a summary of any noted violations, and cross references to food instruments if used by investigators. The system should also capture and maintain data on complaints about vendors received from participants, other vendors, and other sources.

# **Input:**

Complaint Date

Complaint Identification Number

**Complaint Resolution** 

Complaint Source Type

Complaint Status

Complaint Subject

Complaint Summary

Complaint Type Code

Local Agency Identification Number

Participant Identification Number

Vendor Compliance Activity Date

Vendor Compliance Activity Food Instrument Identification Numbers

Vendor Compliance Activity Reason Code

Vendor Compliance Activity Task Code

Vendor Compliance Activity Type Code

Vendor Compliance Activity Violation Indicator Code

Vendor Identification Number

Vendor Monthly Redemptions

Vendor Outlet Identification Number

Vendor Risk Factor Type Code

#### **Process:**

- Input data about the compliance activity and record in Vendor Compliance Activity data store
- Input data from vendor complaints and record in Complaint data store

#### **Output:**

Compliance summary report

Vendor compliance history

Vendor complaint log

# 3.8.5.4 Support Inventory Audits

<u>Level 1.</u> The system should assist State agencies in preparing for inventory audit investigations. These audits include comparing a vendor's redemptions of food instruments with the vendor's internal inventory and sales records. The system should support inventory audits by calculating for a selected vendor outlet the quantities of supplemental foods sold based on the vendor's redemption of food instruments to compare with inventory records that show the quantities of foods purchased for a corresponding period of time.

# **Input:**

Vendor Compliance Activity Date Vendor Compliance Activity Food Purchase Value Vendor Compliance Activity Type Code Vendor Identification Number

#### **Process:**

- For each supplemental food item (e.g., gallon of milk), compare the total amount of that item the vendor purchased for sale in its store to the total amount of redemptions for that item
- Flag any food items for which the vendor had redemptions that exceeded the store's documented inventory and store in Compliance Activity data store

# **Output:**

Vendor sales analysis report

#### 3.8.6 MONITOR SANCTIONS AND APPEALS

Depending on the severity and occurrence of vendor violations, the State agency may sanction a vendor. Sanctions include disqualification, Civil Money Penalties (CMPs) in lieu of disqualification, and administrative fines. Actions in addition to sanctions include remedial training, warning letters, and sanction points. For serious violations, Federal rules prescribe the sanction the State agency must impose. For other violations, the State agency sanctions vendors in accordance with its sanction schedule. After a sanction is imposed, the vendor may appeal the sanction through an administrative hearing and/or judicial proceedings unless the sanction is a result of a Food Stamp referral.

Retaining records of compliance investigations and vendor sanctions is important to support other WIC functions, in particular identifying and scheduling vendors for future compliance investigations, and selecting vendors for WIC authorization. The system should also support the reporting requirements related to compliance buys and sanctions.

Occasionally, vendors disqualified by one State agency will relocate to another State, open a store, and apply for authorization as a WIC vendor. The sharing of compliance and sanction information among WIC State agencies is useful to help identify vendors that have a history of WIC abuse and should not be selected for WIC authorization because of this history.

The system should support this function by retaining a complete history of compliance investigations and vendor sanctions, including those investigations that resulted in sanctions and those for which sanctions were not imposed or not upheld on administrative or judicial review.

#### 3.8.6.1 Manage Vendor Sanctions

Vendors who violate the WIC Program are sanctioned in accordance with State and Federal policy and regulations. Vendors who are disqualified cannot accept WIC food instruments for the duration of their disqualification period. When a vendor is disqualified, the system should store the disqualification information in

the Sanction data store and update the Vendor Authorization data store to reflect a change in vendor status.

Federal rules require mandatory sanctions for the most serious vendor violations. These sanctions include either imposing a disqualification or a Civil Money Penalty in lieu of disqualification where the State agency determines that disqualification of the vendor would result in inadequate participant access. The sanctions include:

- Permanent Disqualification—Conviction of trafficking food instruments or selling firearms, ammunition, explosives or controlled substances in exchange for food instruments.
- Six-year Disqualification—One incidence of trafficking food instruments or selling firearms, ammunition, explosives or controlled substances in exchange for food instruments.
- Three-year Disqualification—
  - One incidence of the sale of alcohol or alcoholic beverages or tobacco products in exchange for food instruments.
  - A pattern of claiming reimbursement for the sale of an amount of a specific supplemental food item that exceeds the store's documented inventory of that food item for a specific period of time.
  - A pattern of charging participants more for supplemental food than non-WIC customers or charging participants more than the current shelf or contract price.
  - A pattern of receiving, transacting and/or redeeming food instruments outside of authorized channels, including the use of an unauthorized vendor and/or unauthorized person.
  - A pattern of charging for supplemental food not received by the participant.
  - A pattern of providing credit or non-food items, other than alcohol, alcoholic beverages, tobacco products, cash, firearms, ammunition, explosives, or controlled substances in exchange for food instruments.
- One-year Disqualification—A pattern of providing unauthorized food items in exchange for food instruments, including charging for food provided in excess of those listed on the food instrument.
- Second Mandatory Sanction—When a vendor receives a second sanction for any of the above sanctions, the sanction is doubled.
- Third or Subsequent Mandatory Sanction—When a vendor receives a third or subsequent sanction for any of the above sanctions, the sanction is doubled and the State agency may not impose a Civil Money Penalty in lieu of disqualification.

In addition, vendors disqualified from FSP are to be disqualified from WIC for the same length of time as the FSP disqualification, and the disqualification period may begin at a later date than the FSP disqualification. However, participant access must be assessed before disqualification action may be taken. See 3.8.7 for more information on WIC and FSP coordination.

When CMPs are imposed for mandatory sanctions, Federal rules prescribe a formula for calculating the penalty. The CMP is 10 percent of the vendor's average monthly redemptions for the period that the disqualification would have been imposed. The CMP cannot exceed \$10,000 per violation or \$40,000 per investigation. When a CMP is imposed, the State agency may allow the vendor to pay under an installment plan and funds paid become program income.

<u>Level 1.</u> The system should support the use of a point system for State agency-established sanctions. The system should automatically determine the number of points to be assigned for specific types of violations and maintain a tally of points accumulated by each vendor. When the point threshold is reached, the system would alert the State agency to sanction the vendor.

<u>Level 2.</u> The system should support the imposition of sanctions by automatically assigning the correct sanction for each type of violation. If a CMP is imposed in lieu of disqualification, the system should set up an account receivable.

#### **Input:**

Sanction Case Current Status

Sanction Case Identification Number

Sanction Case Start Date

Sanction Case Type Code

Sanction Effective Date

Sanction Points Number

Sanction Type Code

Sanction Vendor CMP Amount Assessed

Sanction Vendor CMP Amount Assessed Date

Sanction Vendor CMP Amount Collected

Sanction Vendor CMP Due Date

Sanction Vendor CMP Installment Amount

Sanction Vendor CMP Installment Term

Sanction Violation Code

Vendor Identification Number

Vendor Outlet Identification

#### **Process:**

- Input the violation code for each vendor that commits a violation
- Assign a corresponding sanction for the particular violation
- Calculate the number of points for each vendor violation
- Prepare notice to vendor of sanction imposed
- Establish account receivable if a CMP is imposed and store in Grants data store
- Track CMP payments
- Update Sanction data store

### **Output:**

Vendor sanction summary report Notice to vendor of sanction imposed Summary of CMP's due and paid to date

# 3.8.6.2 Maintain Vendor Appeal Data

<u>Level 1.</u> Vendors have the right to appeal adverse actions, including sanctions. When vendors appeal State agency actions, the system should capture and maintain data about vendor appeals, including tracking appeals from initial request through the final decision. For completed appeals, the system should maintain data regarding the decision and outcome of the appeal.

#### **Input:**

Sanction Case Appeal Indicator
Sanction Case Appeal Outcome Code
Sanction Case Identification Number
Sanction Case Start Date
Sanction Case Status
Sanction Case Type Code
Vendor Identification Number
Vendor Outlet Identification

# **Process:**

- Input data on vendor sanctions initiated in the Sanctions data store
- Update data on vendor sanctions that are resolved in the Sanctions data store

# **Output:**

Vendor appeal summary report Vendor appeal history Notice to vendor indicating outcome of appeal

#### 3.8.7 COORDINATE WITH FOOD STAMP PROGRAM

The WIC State agency and the Food Stamp Program (FSP) must exchange information about mandatory sanctions imposed on vendors/retailers. If a vendor is disqualified by FSP, the WIC Program must disqualify the vendor, unless participant access would be jeopardized by the disqualification. Conversely, if WIC disqualifies a vendor based on a mandatory sanction, FSP must disqualify the vendor, unless exempt in cases of participant hardship. Timely exchange of information between WIC and FSP accelerates the disqualification of abusive vendors, reducing the risk of fraud and abuse in both programs, as well as increasing the effectiveness of investigative resources.

The system should support this data exchange by accepting as input information about FSP sanctions, and by producing reports of WIC sanctions for use by FSP.

## 3.8.7.1 Maintain Food Stamp Program Violation Data

<u>Level 1.</u> The system should capture data from FSP regarding sanctions imposed against vendors that are also authorized by the WIC Program. When the WIC State agency receives notification that vendors have been disqualified from FSP, the WIC State agency should use the FSP ID number to determine if this vendor is WIC-authorized. If so, the State agency can initiate disqualification action.

#### **Input:**

Sanction Referred from Food Stamps
Vendor Food Stamp Identification Number
Vendor Food Stamp Sanctions
Vendor Identification Number

# **Process:**

- Search the list of authorized WIC vendors by FSP identification number
- List vendors with matches

# **Output:**

Listing of WIC vendors that have been disqualified from FSP Notice to WIC vendors of disqualification due to FSP disqualification

# 3.8.7.2 Report WIC Sanctions to the Food Stamp Program

<u>Level 1.</u> The system should generate a notice of disqualification to vendors who abuse WIC, with a copy sent to FSP for reciprocal action. The notice should identify the violation(s) committed by the vendor and include the following required language: "This disqualification from WIC may result in disqualification as a retailer in FSP. Such disqualification may not be subject to administrative or judicial review under FSP."

<u>Level 2.</u> Although FSP does not disqualify vendors based on WIC Civil Money Penalties, FSP may use such information during its authorization/reauthorization process. Consequently, the system should produce a notice to FSP of WIC vendors that have been assessed CMPs in lieu of disqualification and the length of the disqualification periods corresponding to the vendor's violations.

<u>Level 3.</u> When WIC imposes a mandatory sanction on a vendor, the system should produce a notice to FSP with the vendor's name, identification number, type of violation(s), and length of disqualification. The notice must be provided to FSP no later than 15 days after a vendor's opportunity to appeal a WIC sanction has either expired or been exhausted.

#### **Input:**

Sanction Effective Date
Sanction Referred to Food Stamps
Sanction Type Code
Sanction Violation Code
Vendor Food Stamp Identification Number
Vendor Identification Number
Vendor Referred to Food Stamps

#### **Process:**

• Fifteen days after the vendor date to appeal has either expired or been exhausted, produce a notice to FSP of the mandatory WIC sanction including the required vendor information

#### **Output:**

Notice to FSP of WIC vendors receiving mandatory sanctions

#### 3.8.8 CONDUCT VENDOR MANAGEMENT REPORTING

The system should analyze data in the existing database to provide management information for each functional area in a variety of formats. The level of information required by the WIC Program may vary from simple recurring requests to complex data analysis. Information that is needed routinely by a large number of users is most efficiently provided through standard reports. On occasion, WIC State agencies may need to collect information that is not available through standard reports. Such requests may require the synthesis of data elements that are not typically associated. These queries are often one-time requests to answer specific questions. These "on-demand" requests for information are best addressed by an ad hoc query capability. Complex data analysis using data from multiple systems to perform trend analysis over time may require implementation of a data warehouse. The needs of the particular WIC State agency should dictate the level of reporting tools required by that State agency's system.

# 3.8.8.1 Generate Standard Reports

Standard reports provide pre-defined data sets in a consistent format and can be requested through a report menu. These recurring reports can be displayed on the screen, printed in hard copy, or saved to a file for later printing or imported into another software product. To allow for some limited customization of standard reports, the system may allow users to enter data selection or sort parameters to limit the scope data included in the report or method of presenting the data.

The following standard reports are needed within the Vendor Management function.

- Compliance Summary Report This report would list the vendors scheduled for compliance buys with data on the vendor's name, address, history of past violations, high risk indicators, past routine monitoring visits and date planned investigation and assigned investigator.
- <u>List of Authorized Vendors By Identification Number</u> This report would list all vendors authorized by the program with key information (e.g. name, address, type, date authorized, etc.).
- <u>Listing of WIC/Food Stamp Program Dual Disqualification Report</u> This report would list all vendors that FSP has disqualified and sent to

- WIC and the action taken by WIC. It would also list the vendors WIC disqualified and sent to FSP.
- Report of High-Risk Vendors and Their Risk Scores This report lists
  all vendors designated as high-risk, the reason for high-risk
  identification, their respective risk scores and the factors that support the
  risk scores. The report should array the vendors by location to facilitate
  the scheduling of compliance investigations.
- Routine Monitoring Schedule Report This report would list the vendors scheduled for monitoring visits with data on the vendor's name, address, history of past violations, high risk indicators, past routine monitoring visits and date planned for the visit.
- Summary of CMPs Due and Paid to Date This report would track all vendors that were issued CMPs, the date of the CMP, the reason for the CMP in lieu of another sanction, and the amount collected from the vendor.
- <u>The Integrity Profile (TIP) Report</u> FNS requires that all State agencies submit an annual TIP report, which provides vendor characteristics, training, compliance activities and sanctions. Requirements for the TIP report are being revised and can be obtained from FNS<sup>56</sup>.
- <u>Vendor Applications Report</u> This report would list all vendors that have applied for and are under consideration for WIC authorization. This report would display the basic vendor characteristics provided on the vendor application.
- <u>Vendor Attendance at Training Sessions</u> This report would provide a
  calendar of vendor training activities and the vendors that attended as
  well as those that did not and need to reschedule training.
- Vendor Authorizations Actions Scheduled and Completed This report
  would outline the steps needed to complete vendor authorization and
  whether each step has been completed for each applicant vendor.
- <u>Vendor Complaint Log</u> This report would log all complaints received about vendors, date received, complainant information and action taken.
- <u>Vendor Compliance History</u> This report would consolidate all education, monitoring and compliance activities for each vendor.
- <u>Vendor Sales Analysis Report</u> This report would summarize the data from a record audit. It would list the foods audited, the vendor food purchase invoices for those foods, and the total WIC redemptions for those foods.
- Vendor Sanction and Appeal Summary Report This report would list all vendors that the State agency has sanctioned and the vendor has appealed. It would have the date of appeal, status of appeal, hearing date, and outcome of the hearing.

<sup>&</sup>lt;sup>56</sup> This is a core function.

- <u>Vendor Sanction Summary Report</u> This report would list all vendors
  with sanctions and describe the violation, the sanction imposed (warning,
  disqualification, CMP) and date the vendor was advised of the sanction.
- <u>Vendor Selection Assessment</u> This report would list all applicant vendors and the selection factors used to determine authorization, including shelf/bid prices of supplemental foods.
- Vendor Training Schedule This report would provide a calendar of upcoming vendor training activities and the vendors scheduled to attend.
- <u>Vendors By Peer Groups</u> This report lists all vendors according to their peer group assignment.

# 3.8.8.2 Conduct Ad Hoc Queries and Generate Reports

The system should enable the user to generate ad hoc reports.<sup>57</sup> The following are a few examples of the types of ad hoc queries that may be needed in the Vendor Management function:

- Investigators with the Highest Rate of Positive Compliance Buys
- Prepayment Edit/Post-Payment Cost Savings Report
- Ranking of High Volume Vendors
- Vendor Training and High Risk History Report
- Vendor WIC Redemptions That Have Increased Over Several Months
- Vendors Failing to Attend New Vendor or Annual Training Report
- Vendors with Low Monthly WIC Redemptions

#### 3.8.8.3 Maintain Data Warehouse

Examples of the use of the data warehouse in the Vendor Management functional area are:

- Characteristics of Participants Shopping at Abusive Vendors
- Positive Compliance Buys Among High Risk and Non-High Risk Vendors By Investigator
- Vendor Peer Group Food Price Changes Over Past 24 month

# 3.8.8.4 High Risk Vendor Analysis Reports

Descriptions of the High Risk Vendor Analysis Reports can be obtained from FNS.

<sup>&</sup>lt;sup>57</sup> Ad hoc reporting is a future core function.

#### 3.9 SCHEDULING

Automated scheduling capability allows WIC staff to operate more efficiently and see more participants. Appointments and nutrition education classes can be scheduled months in advance and available openings can be easily identified. Scheduling functionality can also allow participants to choose a time that best meets their needs and allows WIC staff to be managed more effectively.

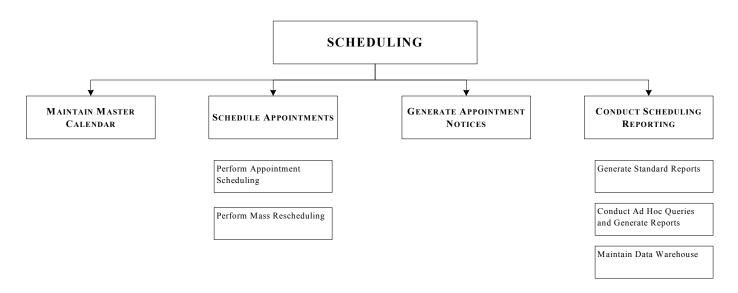
A generic scheduling function can be used for numerous activities in the local agencies and clinics in addition to scheduling applicant and participant appointments. Agency personnel can schedule staff shifts, outreach activities, inservice training, and other administrative tasks using a generic scheduling function. The scheduler can also be used to track resources associated with providing customer service such as meeting rooms, audio-visual equipment, and clinic mobile units.

While the scheduling function is critical in the local agencies and clinics, it is also helpful for other areas of the WIC Program. The Vendor Management function can schedule vendor education classes, monitoring investigations, price survey visits, record audits, and rebate contract negotiations. The Customer Service area can schedule routine equipment maintenance, system training, and vendor/provider visits. State personnel can use this for planning local agency audits, meetings, and in-service training.

The Scheduling functions are:

- Maintain Master Calendar
- Schedule Appointments
  - Perform Appointment Scheduling
  - Perform Mass Rescheduling
- Generate Appointment Notices
- Conduct Scheduling Reporting
  - Generate Standard Reports
  - Conduct Ad Hoc Queries and Generate Reports
  - Maintain Data Warehouse

# WIC FUNCTIONAL REQUIREMENTS - FUNCTIONAL DECOMPOSITION DIAGRAM SCHEDULING



#### 3.9.1 MAINTAIN MASTER CALENDAR

Level 1. The system should maintain a master calendar for scheduling purposes. This master calendar can be used by a local agency or individual clinic. A WIC staff person can build the master calendar by specifying the maximum available slots, the available staff, and other appointment dates, types and durations. Additional parameters for other characteristics of appointments, such as the language of the class, can be added into the calendar. Based on these parameters, the system should create a calendar in advance. Calendars should be set-up at different levels (e.g., staff member, clinic, local agency, State agency staff, etc.). The user should be able to define event types for easy scheduling and set up. WIC staff should be able to add, update and delete information from the calendar as necessary. The time period covered by a specific master calendar should be parameter driven so that it can also vary according to user needs.

<u>Level 2.</u> For each event slot on the calendar, the staff member constructing the calendar should enter the event type, responsible staff, meeting room location, needed resources, duration, and the number of available slots for the event. The specific information associated with the event depends on the type of event.

<u>Level 3.</u> When scheduling an event, needed resources can be associated with the event. Meeting rooms, audio visual equipment, furniture, pamphlets/publications, and other resources can be assigned to a given slot on the calendar. As available resources are assigned to specific slots on the master calendar, the resources should be deleted from the available resource list so that they can no longer be scheduled. Once the resources are again available after the event, they can be added back to the available resources list.

# **Input:**

Clinic Identification Number

**Event Slot Date** 

**Event Slot Description** 

**Event Slot Duration** 

Event Slot Language Code

**Event Slot Maximum Number of Slots** 

Event Slot Required Resource Type Code

**Event Slot Time** 

Event Slot Type Code

Local Agency Identification Number

Master Calendar Create Date

Master Calendar End Date

Master Calendar Identification Number

Master Calendar Start Date

Master Calendar Type Code

Resource Description

Resource Identification Number

Resource Type Code

### **Process:**

- Accept user input specific parameters
- Generate calendar with available characteristics and slots based on these parameters
- Assign needed resources from the available resource list and remove the resource from the list for that slot
- Update the Master Calendar and Event Slot data stores

# **Output:**

Master calendar

#### 3.9.2 SCHEDULE APPOINTMENTS

#### 3.9.2.1 Perform Appointment Scheduling

<u>Level 1</u>. Using the master calendar, WIC staff can track the availability of a particular date and time to ensure that a particular appointment slot is available when scheduling a participant. Each time an appointment is scheduled for a specific slot, the system should decrement the number of available slots. When all the slots are full (meaning the date and time is full for a particular day or all class slots are filled for a particular class time), the system should notify the WIC staff of this condition. However, the system should allow the staff to select another time and/or date, or add an appointment even when all schedule slots appear to be full (e.g., allow overbooking to compensate for expected no shows).

<u>Level 2.</u> The system should schedule appointments for certification, nutrition education, and food benefit pick-up. The system should also allow the provision of extra time slots to accommodate walk-in applicants. The system should also be flexible enough to accommodate the scheduling needs for different target audiences and levels of the WIC Program. For example, the appointment scheduler should be capable of scheduling vendor events, customer service events, and outreach activities. In some cases, as in a nutrition education or vendor training class, a staff member scheduling the appointment may need to keep track of the number of anticipated attendees.

<u>Level 3.</u> The system should track attendance at scheduled events. The user may manually enter the status of an appointment (e.g., attended, rescheduled, noshow) into the system.

<u>Level 4.</u> The system should accept applicant preferences for an appointment time. The preferences may include such parameters as time of day, day of week, language, linkage with other family members, and linkage with other services (e.g., prenatal or well-child appointments). Once the preferences are entered, the appointment scheduler should suggest available appointments that match the preference criteria.

<u>Level 5.</u> In an ESD environment, the participant may swipe a card and use information on the card to update the attendance status. In a class with multiple anticipated attendees, the system should track the number of actual attendees.

# **Input:**

Education/Training Offer Class Code

**Event Preference Preferred Day** 

Event Preference Preferred Language Code

Event Preference Preferred Time

Participant Family/Household Identification Number

Participant Identification Number

Scheduled Appointment Date

Scheduled Appointment Missed Reason

Scheduled Appointment Number of Actual Attendees

Scheduled Appointment Number of Expected Attendees

Scheduled Appointment Outcome Code

Scheduled Appointment Time

Scheduled Appointment Type Code

#### **Process:**

- Accept user entered appointment preferences and store in Event Preference data store
- Check for appointment availability at particular time and date that meet preference parameters
- Adjust appointment time when preferences cannot be matched
- Collect and store daily appointment schedule data and applicant appointment data in the Scheduled Appointment data store
- Decrement the Appointment Maximum Available Slots (the maximum number of slots available for a particular day and time or for a particular class) each time a new appointment is made
- Accept user entered attendance data or card swipe and update Scheduled Appointment data store with attendance data

# **Output:**

Screen display of appointment schedule availability Screen display of applicant's appointment schedule Daily schedule of appointments by event type

# 3.9.2.2 Perform Mass Rescheduling

Clinics may need to reschedule all appointments on a certain day or at a certain time due to conflict, availability of staff, or adverse weather conditions.

<u>Level 1.</u> The system should allow the user to select a day, time, or event and reschedule all appointments for another day, time, or event. The system should generate a list of applicants, participants, vendors, or other parties that have been rescheduled.

<u>Level 2.</u> The system should generate a notice to each applicant, participant, vendor, or other party who has had an appointment rescheduled.

<u>Level 3.</u> The system should generate a file of applicants, participants, vendors, or other parties that have been rescheduled to send to an autodialer.

# Input:

Education/Training Offer Class Code Scheduled Appointment Date Scheduled Appointment Outcome Code Scheduled Appointment Time

#### **Process:**

- Retrieve appointment schedule for the selected day, time or event
- Update Scheduled Appointment Outcome Code to Rescheduled
- Update Scheduled Appointment Date and Scheduled Appointment Time with new appointment information in the Scheduled Appointment data store

#### **Output:**

List of rescheduled appointments

#### 3.9.3 GENERATE APPOINTMENT NOTICES

Level 1. The system should print a notice for the applicant or participant if an appointment is made for a subsequent visit. This notice would serve as a reminder to the applicant or participant and would include the individual's name, the type of appointment, the date, and the time of the appointment. The system should also be able to print out mailing labels to expedite the postage of notices to participants. Appointment notices can be printed for certification, nutrition education, and food benefit pick-up. The system should have the ability to maintain appointment notice templates that can be rapidly filled with specific information related to a participant, as necessary.

<u>Level 2.</u> The system should have the ability to download a file into an automated dialer, so participants may be reminded in advance of their appointments or notified that they need to reschedule a missed appointment. Future functionality may allow this process to occur via Email as well.

# **Input:**

Participant Identification Number Scheduled Appointment Date Scheduled Appointment Document Code Scheduled Appointment Time

# **Process:**

- Accept user request to generate an appointment notice or mailing labels
- Retrieve data from the Scheduled Appointment and Participant data stores
- Create an Appointment and Reschedule Notices
- Create Mailing Labels
- Create an Appointment File
- Download Appointment File to Autodialer

# **Output:**

Appointment and reschedule notices Mailing labels Appointment file

#### 3.9.4 CONDUCT SCHEDULING REPORTING

The system should produce reports for local agencies to use in managing their appointment schedule. While standard reports are necessary, ad hoc reports are also particularly helpful in determining appointments for individuals.

# 3.9.4.1 Generate Standard Reports

Standard reports provide pre-defined data sets in a consistent format and can be requested through a report menu. These recurring reports can be displayed on the screen, printed in hard copy, or saved to a file for later printing or import into another software product. To allow for some limited customization of standard reports, the system may allow users to enter data selection or sort parameters to limit the scope of data included in the report or method of presenting the data.

The following standard reports should be available from the Scheduling functionality:

- Applicant's Appointment Schedule This report can be used to aid WIC staff in confirming the participant's appointment schedule. By printing out the participant's appointment schedule, the WIC staff can give the participant a hard copy to take home as a reminder.
- <u>Appointment Schedule Availability</u> Although appointment scheduling is usually performed on-line, there may be some instances in which a report of available appointments would be helpful. This report is used to display the appointment schedule availability for a particular day and time to aid WIC staff in confirming the availability of a requested appointment slot.
- <u>Daily Schedule of Nutrition Risk Assessments</u> This report is used to display all nutrition risk assessment appointments for a particular day to support appointment scheduling and advance pulling of the applicant files for that day. Similar reports can be generated for other types of appointments including nutrition education and food benefit pick-up.
- <u>Missed Appointment Report</u> This report lists the participants who missed an appointment and can be used for follow-up.

# 3.9.4.2 Conduct Ad Hoc Queries and Generate Reports

The system should enable the user to perform ad hoc reporting.<sup>58</sup> Ad hoc queries are particularly useful in the scheduling area. Individual staff members may

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<sup>&</sup>lt;sup>58</sup> Ad hoc reporting is a future core function.

choose to query the master calendar for their own list of appointments. These appointment lists may be generated for the day, week, or month. The following are examples of ad hoc queries in the Scheduling functional area:

- Times at which breastfeeding classes in a language other than English will be taught
- Number of appointments available during evening and Saturday hours
- Frequency of class offerings in Infant Feeding
- Schedule of WIC clinic special events

# 3.9.4.3 Maintain Data Warehouse

The data warehouse may be used in the Scheduling functional area to look at trends in clinic traffic, impact of evening hours on participation rate, and the potential relationship between convenient class times and popularity of WIC classes. Data from the Event Slot, Event Preference, Master Calendar, and Scheduled Appointment data stores should be incorporated into the data warehouse.

Examples of data warehouse queries for the Scheduling functions include:

- Impact of class times on attendance rates among different categories of participants
- Impact of evening hours on participant satisfaction
- Impact of vendor education attendance on vendor sanctions

#### 3.10 System Administration

The System Administration functional area is intended to contribute to the overall flexibility, efficiency, and security required to operate and maintain the system. This functional area provides the capabilities to maintain information contained in system data (reference) tables, to control general access to the system as well as the ability to perform specific functions, to perform system "housekeeping" and maintenance functions, and to move certain files to off-line storage for increased system efficiency. Additionally, this functional area includes reports that are relevant to monitoring system operation and performance.

Depending on the architecture of the system, system administration functions can be performed at a central location for all sites, locally at individual sites, or a combination of both (centrally controlled system administration with local code table update capability). Central system administration functionality allows greater control and encourages consistency of system configurations across multiple sites. It reduces the time demands placed on local clinic staff to manage the system. Local system administration functionality allows greater flexibility in configuring the system and its data tables, but can lead to inconsistencies in code table usage. While local administration can require more local agency staff time, it may result in quicker problem resolution when the administrator is onsite.

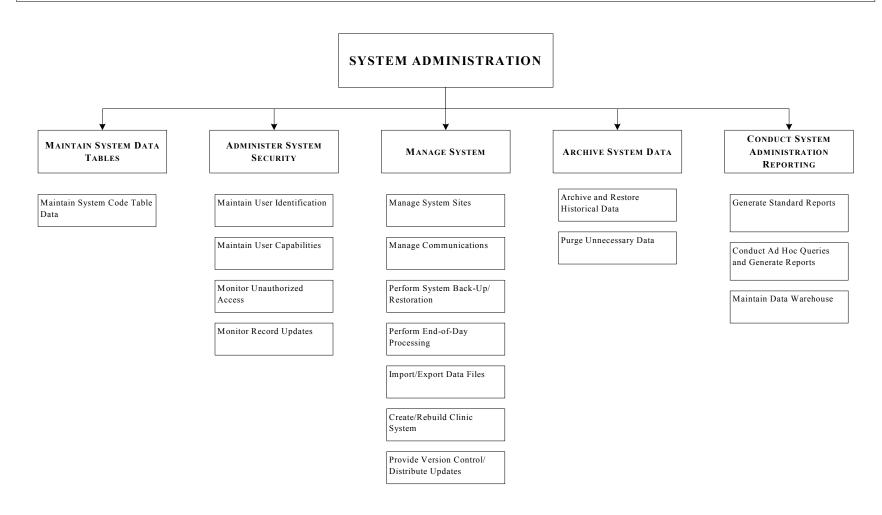
System Administration is made up of the following functions:

- Maintain System Data Tables
  - Maintain System Code Table Data
- Administer System Security
  - Maintain User Identification
  - Maintain User Capabilities
  - Monitor Unauthorized Access
  - Monitor Record Updates
- Manage System
  - Manage System Sites
  - Manage Communications
  - Perform System Back-Up/Restoration
  - Perform End-of-Day Processing
  - Import/Export Data Files

- Create/Rebuild Clinic System
- Provide Version Control/Distribute Updates
- Archive System Data
  - Archive and Restore Historical Data
  - Purge Unnecessary Data
- Conduct System Administration Reporting

  - Generate Standard Reports Conduct Ad Hoc Queries and Generate Reports
  - Maintain Data Warehouse

# WIC FUNCTIONAL REQUIREMENTS - FUNCTIONAL DECOMPOSITION DIAGRAM SYSTEM ADMINISTRATION



#### 3.10.1 MAINTAIN SYSTEM DATA TABLES

State and local agencies must have the flexibility to adapt to periodic changes in food packages, clinic sites, nutrition measurement, vendor risk, and other elements of the WIC Program. In an automated system, many of these data elements are stored in data code tables used for data validation and other internal system processes. For the sake of efficiency, many of these data elements are stored as one- or two-digit codes. Each code typically has a full text translation. These codes and accompanying text are established by the State agency. Data elements contained in data code tables are also shared with one or more data stores.

This data code approach to maintaining information becomes useful for entering data entered into the system. For example, when a participant's racial or ethnic origin is recorded during enrollment processing, the racial/ethnic code entered into the system is compared to the legitimate codes contained in the Racial/Ethnic Code data code table. If the code is located in the table, the information is accepted and stored by the system. If, however, the code does not exist in the table, the system returns an error message to the user.

The ability to maintain the system's data code tables is critical to allow the system to easily adapt to changes in the WIC Program. The information in these tables must be current and accurate to ensure the accuracy of the data validation processes that take place in the system. Incomplete or erroneous data in the data tables may permit the entry of invalid data, or prevent the entry of legitimate information.

The system must allow authorized users to review and update the data contained in the system data code tables. It is recommended that the update of data code table elements occur in a real-time mode so that changes can be accessed by the data validation process immediately. This implies that data code tables are shared outside the application programs. However, some tables (e.g., tables unique to a single process) could be hard coded within programs. While this is a design issue, it is important to note it in this discussion.

The approach to updating data code tables may vary from system to system depending upon the architecture of the system. Some systems utilize a centralized capability to update the data code tables with the updated tables being downloaded to local sites, while other systems enable local update of data code tables. Alternatively, some systems incorporate both means of updating the data code tables.

The suggested data code tables for an automated State system and their definitions are listed in Section 4.2, Data Tables.

#### 3.10.1.1 Maintain System Code Table Data

<u>Level 1.</u> The system should support this function by allowing authorized users to add, delete, or change data elements in the defined tables via the application (i.e., screen). Users should not be allowed to change any of the characteristics of the data elements such as field length or field type through this function - those types of changes should necessitate programming modifications.

# Input:

The system should allow addition, deletion, or update of any unrestricted data element contained in the data code table. Most data code tables consist of a code and a description of the data that each code represents. The individual data elements for each of the suggested data tables are contained in Section 4.2, Data Tables.

#### **Process:**

- Edit new and updated data elements
- Store edited data in appropriate data code table

#### **Output:**

Screen display and report of data code table

#### 3.10.2 ADMINISTER SYSTEM SECURITY

Federal regulations require that only authorized individuals have access to WIC information. Access to sensitive health and income information must be limited to those individuals at State and local agencies that require such information to serve WIC participants. The issuance of food benefits is another sensitive area that requires tighter controls than most other management information or participant processing functions. The various controls placed on access to the system in general and these areas in particular, constitute a large part of system security.

Administering system security is important because it protects the access to information in the system. System security prevents unauthorized individuals from entering or updating WIC information. It also provides a means of ensuring that only those individuals that have been adequately trained in system operations can access any of the system's functions. Finally, accurate identification of the users enables the system to create a complete audit trail of all transactions in the system.

In general, the system should support standard security features such as system generated user codes, passwords, timed logouts, and terminal lockup after a given number of unsuccessful system access attempts. The system must be able to distinguish between those capabilities that can be performed by a State agency user and those that can be performed by a local agency user. For example, enrollment processing is usually performed at the local level, while vendor management is primarily the domain of the State agency. In this specific function, the WIC IS should allow authorized users at the State agency level to add, delete, or update user access and identification information in the system. In a distributed system, user administration may be performed by local agency staff who are authorized by the State agency to perform this function.

Optimally, the system should provide the ability to record and control the specific capabilities of each user at a level defined by the State agency. State and local agencies might also want the capability to record and review attempts at unauthorized access to the system.

#### 3.10.2.1 Maintain User Identification

Level 1. The system should allow authorized users (usually the system administrator) at the State agency level to add, delete, or update users in the system. When a new user is entered, the system should assign (or accept from entry) a User Identification that uniquely identifies the user and associates the user with a specific State or local agency. The system should then produce a notice to be sent to the user, which provides the new User ID and a temporary password to gain initial entry into the system. It should be required that users change their temporary passwords at the time they first log onto the system, and on a regular basis thereafter (30 to 60 day intervals are suggested). The system should prompt users to change their passwords 7 to 14 days in advance of password expiration and should maintain a list of the last few (10 to 12) used passwords so that the user cannot select a password that they recently used.

In the future, emerging technologies may be used to more securely verify a user's identity before access is granted to the system. Such emerging technologies may include the use of an integrated circuit chip (smart card) to maintain a user's password or a digital certificate. When a user logs onto the system, the security application can read the smart card and retrieve either a password or a digital certificate for verification. The identity of the cardholder would then be verified prior to granting access to the system. This new technology would operate similarly to the use of passwords.

#### **Input:**

User Identification End Date

User Identification Number

User Identification Start Date

User Last Modified Date

User Last Modified User

User Name

User Organization Supervisor

User Password (Encrypted)

User PIN (Encrypted)

User Social Security Number

User Supervisor Telephone Number

User Telephone Number

User Title/Role

#### **Process:**

- Create User Identification (if not entered)
- Store edited user data in the User data store

#### **Output:**

User ID confirmation notice Screen display of all users

# 3.10.2.2 Maintain User Capabilities

<u>Level 1.</u> The system should also control access to specific functions within the system. Access to these functions is controlled by a series of yes/no indicators for each user ID in the system that specify which functions the user is authorized to perform. For example, a clerk may be allowed to enter eligibility data, but not allowed to issue food benefits.

The system should enable authorized users (e.g., System Administrator) at the State and local agency levels to update these indicators for each user at their specific site. The system should provide a display screen that identifies the authorized capabilities, and print a listing with the names of all users at a site authorized to perform a specific function.

# **Input:**

User Access Function Code
User Access Function Privilege
User Identification Number

#### **Process:**

- Accept user entered user access function and function privileges
- Validate User Identification and capability data
- Store or update capability data in the User Access data store

# **Output:**

User capability profile Audit file

# 3.10.2.3 Monitor Unauthorized Access

<u>Level 1.</u> The system should monitor attempts by users (who have general access to the system) to gain access to specific functions for which they are not authorized according to the capability list described in the previous capability.

The system should produce a report, upon request, that lists individuals who have attempted to gain unauthorized access to WIC functions.

## **Input:**

Unauthorized Access Date
Unauthorized Access Function Code
Unauthorized Access Terminal Identification Number
Unauthorized Access Time
User Identification Number

#### **Process:**

- Record user ID, date, time, and terminal location for each unauthorized access attempt
- Generate Unauthorized Access Report upon request

# **Output:**

Unauthorized access report

### 3.10.2.4 Monitor Record Updates

Level 1. To support detailed auditing of system usage, the system should capture the specific user who has updated system records. Each time a user enters or changes a data element, the system should associate a user ID number with the modified data field, as well as a date for the data element change. If there is any need in the future to trace changes to the database, the system audit files produced as a result of this function could be reviewed. The system should produce a report, upon request, that lists specific changes to data and the user and date associated with these changes. This is especially important for tracking certification functions that must be performed by different entities.

# **Input:**

Last Modified Date Last Modified User User Identification Number

### **Process:**

- Record user ID, date, and time each modification of the system data
- Create Audit File

# **Output:**

Modified data element audit file/report

#### 3.10.3 MANAGE SYSTEM

The system should automatically monitor and support the ongoing operation of the system and its components. This function includes system configuration processes, system back-up and recovery activities, and end-of-day processes. In fully centralized systems, many of these functions are performed at a central data facility. In a distributed system, local agencies must perform these routine system "housekeeping" functions.

# 3.10.3.1 Manage System Sites

<u>Level 1.</u> The system should enable system administrators to specify parameters for configuring the installation of the system in local clinics. It should also be possible to designate the characteristics of the hardware components installed in each physical location. Distributed systems should have the flexibility to set-up individual locations to operate in a stand-alone or LAN environment, depending upon the characteristics of the local technical environment.

### **Input:**

Local Agency System Set-Up Parameter

#### **Process:**

- Accept system configuration parameters
- Edit new and updated system configuration parameters
- Store edited parameters in Local Agency data store

#### **Output:**

Screen display and report of system parameter settings

# 3.10.3.2 Manage Communications

Level 1. The system should have the capability to transmit and receive transactions of various types through designated communications capabilities. The types and content of the transmissions may vary depending on the architecture and capabilities of a system. Food Instrument transactions and participant certification data should be communicated electronically in real-time or in batch transmission during end-of-day processing<sup>59</sup>. For example, a

<sup>&</sup>lt;sup>59</sup> This is a core function.

distributed system may aggregate certification data and transmit that data at the end of the day to the central state database or, in the case of EBT, to the EBT Processor. Similarly the system may receive downloads of system code tables, participant transfer data, dual participation verification files, or "hot card" lists from the State. The transmission may operate over dial-up or point-to-point lines, public networks (i.e., the Internet), or wireless transmission (e.g., radio frequency or satellite transmission).

Regardless of the transmission content or channel, the system must be able to perform the following functions when transmitting a transaction/file: aggregate appropriate data for transmission, route the transmission, and receive notice of the success or failure of the transmission. In the case of transmission failure, the system must be able to retransmit the transaction and to acknowledge transmission failures (as well as successes). Conversely, when receiving transmissions from other systems, the system must be capable of receiving the transmission, checking the transmission for error, and generating an acknowledgement transaction. The system may use polling techniques, scheduled transmissions, on-demand transmissions or other protocols depending on the requirements and design of the specific system.

# Input:

The transaction file content depends upon the type of data being transmitted. Section 4.3 describes various types of transaction files in greater detail. However, the following standard transaction control elements should be included:

Bit Map, Primary
Bit Map, Secondary

Message Type

Other Optional Data Elements Depend upon the Transaction Type Other Required Data Elements Depend upon the Transaction Type Systems Trace Audit Number

Transmission Date and Time

#### **Process:**

To transmit transactions, the system should perform the following processes:

- Aggregate Transactions
- Create Transaction File

- Transmit/Route Transaction File
- Receive Transaction Response
- Retransmit Transaction
   To receive transactions, the system should perform the following processes:
- Receive Transaction
- Check Transaction for Error
- Generate Transaction Response
- Update Database with aggregated transactions

# **Output:**

Transaction response

# 3.10.3.3 Perform System Back-Up/Restoration

Level 1. The system should be backed-up daily so that data are restored in the event of a system outage. The method for back-up may vary from system to system. Typically in centralized systems the data are backed-up at the data center, while in distributed systems the data are backed-up at each site. Systems may have an automated back-up system that triggers a daily back-up at a scheduled time without user intervention. Alternatively, some systems may require manual intervention to create the back-up file for the system. If a system failure occurs, the backed-up data are used to restore the database to its existing state just prior to the failure. To restore the database, the data are copied from the back-up file to the database tables. A mirrored backup on a backup drive would provide redundancy for quick recovery in case of drive failure. Data can also be "striped" across more than two back up drives. Also, offsite storage of the application and vital programs at a remote hotsite should be addressed in case of disaster.

# Input:

All newly entered data since last back-up

#### **Process:**

To back-up the data, the system should perform the following processes:

- Initiate timed back-up procedure
- Create Back-Up File

To restore the data, the system should perform the following processes:

- Load Back-Up File
- Copy Back-Up File to Database

### **Output:**

Screen display confirming completion of successful data backup/restoration

# 3.10.3.4 Perform End-of-Day Processing

Level 1. The architecture of a system impacts the extent and type of end-of-day processing. With an on-line centralized architecture, in which the local agencies are directly connected to the host processor and transactions are performed in real time, end-of-day processing is generally limited. In distributed systems without an ongoing, on-line connection to the central host, transactions may be collected during the day and transmitted in a batch file at the end of the day. These aggregated transactions may include new certifications, changes to existing participant records, food benefits issued, and any other transactions performed over the course of the work day in local clinics. End-of-day transaction files may be sent to a variety of systems including, but not limited to, the central host, financial institution, State agency, or EBT Processor. End-of-day processing may also entail the uploading of modified satellite clinic data to the local administrative site when the satellite clinic database has been checked out from the local administrative site.

Level 2. In an EBT environment, the system would collect account set-up and benefit authorizations from local clinics and send it to the EBT Processor during the end-of-day processing cycle. Additionally, during the redemption phase, vendors collect food item level sales data that is typically stored in a store controller during the day and sent to the EBT Processor for settlement during end-of-day closeout. Such item level data are consolidated by the EBT Processor and sent to the state agency system. This data are used by the State for vendor management, financial management, and dietary assessment. Depending on the architecture and policies of an ESD environment, a central host may be used to maintain the participant's complete medical record. In such an environment, end-of-day processing would entail uploading of medical encounter data.

## **Input:**

Bit Map, Primary

Bit Map, Secondary

Message Type

Systems Trace Audit Number

Transmission Date and Time

Other Required Data Elements Depend upon the Transaction File Type being transmitted

Other Optional Data Elements depend upon the Transaction File Type being transmitted

#### **Process:**

- Retrieve Transactions
- Create End-of-Day Transaction File
- Transmit/Route End-of-Day Transaction File
- Verify Receipt of End-of Day Transaction File
- Retransmit End-of-Day Transaction File

# **Output:**

Screen display confirming completion of successful end-of day transmission

# 3.10.3.5 Import/Export Data Files

<u>Level 1.</u> Some functionality needed to support WIC business processes may be automated but performed outside the main system. This functionality is provided through stand-alone applications that operate on separate hardware platforms, but require the use of data collected and maintained through the main system. For example, some states perform caseload management and financial analyses in Commercial-Off-the-Shelf (COTS) spreadsheet packages. These generic packages need financial and participation data collected through the WIC IS to perform this functionality.

Alternatively, legacy applications may create data that is needed for processing within the WIC IS. For example, a WIC IS may use information imported from the state Medicaid files to determine adjunct income eligibility. Consequently, the WIC IS should be able to import data from other systems as well as to extract data to be exported to external systems.

## **Input:**

Required data elements depend upon the type of data being exported/imported.

#### **Process:**

To export the data, the system should perform the following processes:

- Retrieve Data
- Format Data
- Create export file

To import the data, the system should perform the following processes:

- Receive import file
- Update system database with data from import file

# **Output:**

Required data elements depend upon the export file type.

# 3.10.3.6 Create/Rebuild Clinic System

Level 1. The WIC Program often uses temporary facilities as clinic sites. Consequently, the clinic system may have to be created or rebuilt frequently to accommodate changes in clinic locations. To initially create or rebuild a clinic system, the system administrators should install the hardware and software, configure the system for the specific technical environment of the particular location, convert data from existing systems (or manually input data from existing paper files), populate the appropriate code tables, and assign relevant system usage parameters. In a distributed system, creating satellite clinics may entail checking out the database from the "owning" local administrative site.

# **Input:**

All legacy data in local database at system initiation including system code and security tables.

#### **Process:**

- Install hardware and software
- Configure the system
- Build the local database/convert data from legacy system/check-out satellite database from "owning" site
- Set-up system code tables
- Set-up security tables
- Set-up communications structure

• Set-up system parameters

#### **Output:**

Configured clinic system

# 3.10.3.7 Provide Version Control/Distribute Updates

The requirements for configuration management vary according to the architecture of the system. In a centralized system, software version control is relatively easy to manage. The data center staff controls the version of software running on the central host to which all sites are linked. When an update to software is made, the software is replaced on the central processor and the linked terminals/workstations all run the same software. However, in a distributed system, it is more difficult to ensure proper version control and standard Participant configurations. A consistent process is needed for maintaining version control, as well as distributing and installing any updates to software in individual sites.

<u>Level 1.</u> Configuration management processes, as well as software distribution can be automated for a system. The system should poll local sites to verify that the correct software version is running on workstations at the local sites. Further, the system should enable the downloading of updated software to be automatically distributed to each local LAN or standalone workstation and to ensure that updates run during periods of low (or no) clinic activity (e.g., at 3 am). The system should also acknowledge failed and successful updates.

# **Input:**

Software Updates

#### **Process:**

- Log software version release
- Poll terminals/workstations for software version
- Download software update to workstation
- Verify software version by retrieving current version number from local database and matching the retrieved version number with the required version number
- Install new software when retrieved version number does not match required version number

# **Output:**

Updated software

#### 3.10.4 ARCHIVE SYSTEM DATA

WIC Program requirements stipulate that program records be kept for a minimum of three years. To satisfy this requirement while preserving efficient system operation, it is necessary to remove information that is not required for the day-to-day processing in the system. Historical WIC data can be stripped from the system and stored off-line (archived) for potential future use.

# 3.10.4.1 Archive and Restore Historical Data

<u>Level 1.</u> The system should archive historical WIC participant records according to parameters specified by the State agency. It should be possible to specify different periods for different types of records since it is important to retain some types of data for longer periods than others. The system should leave some type of indicator that informs a user that a record was previously stored in the system and is now located in the system archives. The system must also be able to retrieve those files for user access within 24 hours, upon request. Operating procedures should be established at local agencies and clinics to request retrieval of this information so that participants are not turned away because their files are not available on line.

#### **Input:**

Archive End Date

Archive File Number

**Archive Location** 

Archive Name

Archive Parameters to select data for archiving

Archive Record Type Code

Archive Start Date

#### **Process:**

To archive historical data, the system should perform the following processes:

- Copy historical data to storage medium based on user-provided date parameters
- Strip archived data from the system

To restore archived data, the system should perform the following processes:

Load data files or individual records according to user-specified parameters

# **Output:**

Archive files

# 3.10.4.2 Purge Unnecessary Data

<u>Level 1.</u> This process is identical to the archive process described above, with the exception that the data are not stored before they are stripped from the system. State agencies may collect some types of information that are of no use after the period that they are needed on-line. The system should allow this information to be purged completely.

# **Input:**

**Purge Parameters** 

#### **Process:**

- Retrieve data that meets the purge parameters
- Strip data to be purged from the system

# **Output:**

Purge file

Purge report

#### 3.10.5 CONDUCT SYSTEM ADMINISTRATION REPORTING

In the System Administration functional area, standard reports are used more than ad hoc queries or data warehouse searches.

#### 3.10.5.1 Generate Standard Reports

The following standard reports are needed within the System Administration function:

- <u>Authorized User Report</u> This screen provides a list of all authorized users at a specified site to assist the system administrator.
- <u>Code Table Change Report</u> This screen/report allows users to identity when changes have been made to the content of data tables and who has made these changes.
- <u>Code Table Report</u> This report allows users to verify the current content of data tables to be used in preparing inputs to the system and in reading output reports. The Code Table Report is generally requested by the System Administrator as needed to verify code table updates.
- <u>Communications Exception Report</u> This report provides detailed information about transactions that were not completed satisfactorily. It can identify sources of transmission errors or patterns of transmission problems.
- End-of-Day Processing Transaction Log This report provides a detailed audit log of all transactions that occurred during a processing day at a local site.
- Modified Data Element Report This report provides detailed audit information about changes to the system data. It can be used to report information to identify any fraudulent patterns of system usage by entering a particular location, period of time, or user to show types of changes made.
- New User ID Report This report confirms the establishment of new users in the system and provides the new ID and temporary password to that user.
- <u>System Back-up/Restoration Report</u> This report provides detailed information about files that were backed-up or restored at a local clinic.
- <u>System Performance Report</u> This report provides a detailed listing of the performance level of terminals at each site. It can be generated for an individual site or for all sites, is used to detect equipment problems in a particular location.
- <u>Terminal Configuration Report</u> This report provides a detailed listing of the terminals at each site and the software running on each terminal.

This report can be used to control the software configuration on workstations.

- <u>Transaction Processing Report</u> This report provides detailed information about batch transmissions sent to the host. It shows the last upload by terminal, number of transactions in a batch, and counts of transactions by type.
- <u>Unauthorized Access Report</u> This report provides detailed information about attempts to gain access to the system (invalid entry of PIN) or to specific functions for which a user is not authorized. It is used by State or local agencies to verify a specific user's unauthorized access and help detects user fraud.
- <u>User Profile Report</u> This report provides a listing of the functional capabilities for a user in the system. It is used on demand by State and local agencies to verify user privileges.

# 3.10.5.2 Conduct Ad Hoc Queries and Generate Reports

The system should allow the user to generate ad hoc reports.<sup>60</sup> The following are a few examples of the types of ad hoc queries that may be needed within the system administration function:

- Performance history of a particular terminal or site
- Record updates by specific location or user over period of time
- Type of Code Table Changes by location and/or user
- Unauthorized access attempts by a specific user over a specific period of time

#### 3.10.5.3 Maintain Data Warehouse

Most of the data in the data warehouse should be based on clinic transactions. However, some system administration data about unauthorized access and record updates may be useful in a data warehouse when tracking vendor or clinic fraud over a period of time. Security data from the User and User Security data stores showing user access privileges and system access attempts by the user may be useful in the data warehouse. Data from the system audit files may be useful in pinpointing security issues, such as more than three unsuccessful PIN entry attempts. In the data warehouse environment, this security data may be fused with data from other functional areas, such as Benefit Issuance and Benefit

<sup>&</sup>lt;sup>60</sup> Ad hoc reporting is a future core function.

Redemption, Settlement, and Reconciliation to identify areas of potential clinic fraud. Some examples of data warehouse queries include:

- Identification of clinics showing a high number of unauthorized access attempts, as well as a high incidence of unissued but redeemed food benefits
- Patterns in security breaches over time
- Regions of the state with the highest level of security breaches over time